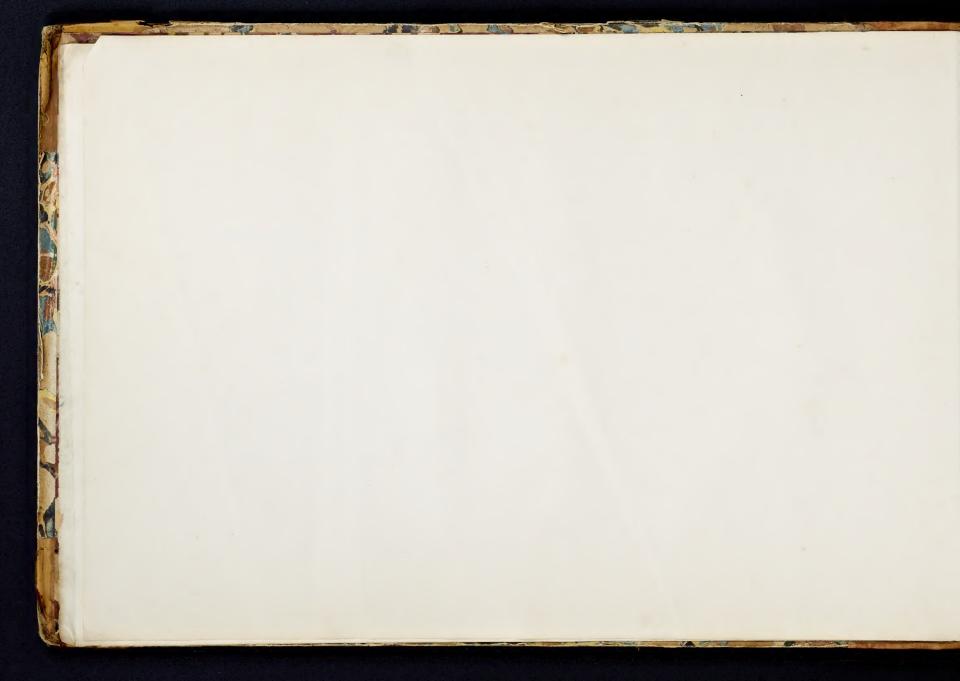
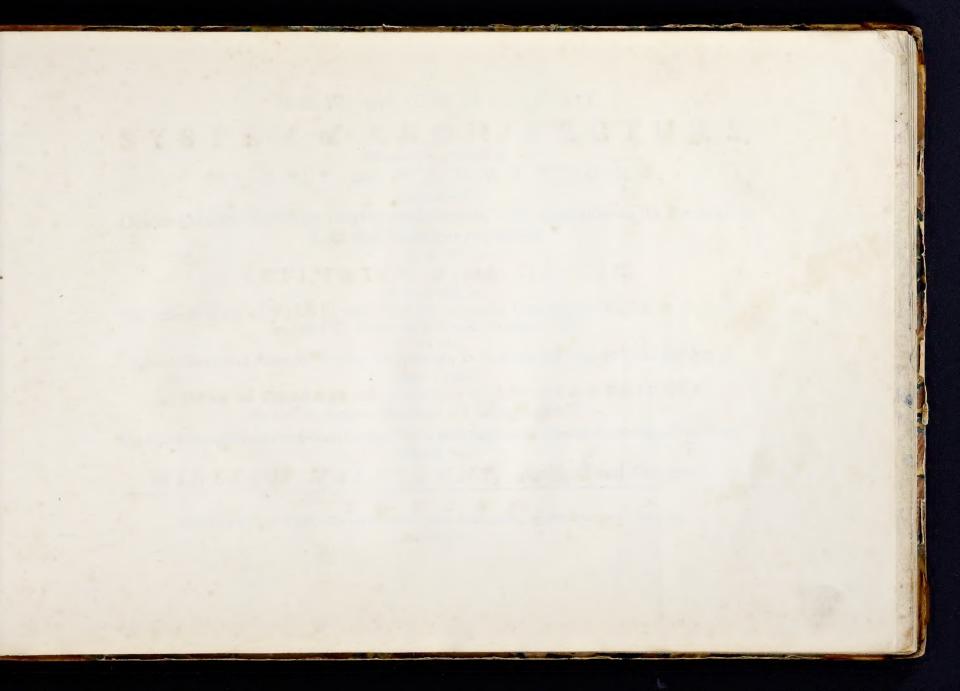




TABLE POPER?





NEW and COMPLEAT

SYSTEM of ARCHITECTURE,

Delineated in a Variety of

PLANS and ELEVATIONS;

Together with

Offices and Out-Buildings proportioned thereto, and appropriated to the feveral Uses and Situations required;

AND

ESTIMATES of each DESIGN.

Prefixed to these are

Ten different Sorts of PIERS, with GATES of various Compositions suitable to the same; intended for Entrances to Courts, Gardens, &c.

ALSO

New Architectonic Rules for drawing the Members, in all Kinds and Proportions of the Orders.

To which is added,

A Method of Discharging and Supporting of ARCHES in BRIDGES,
As it often happens that there is a finking in the Piers.

The Whole comprised on Forty-seven Copper-Plates, with Explanations thereto in common Press Work.

Designed by

WILLIAM HALFPENNY, Architect and Carpenter.

LONDON:

Printed for R. SAYER, Map and Printseller, at the Golden-Buck, opposite Fetter-Lane, Fleet-street.

M.DCC.LIX.

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PREFACE

To the R E A D E R.

S necessity was the parent of building, convenience should be the Architect's first view; this in the following designs I have made the principal and foundation; as to beauty and magnificence, they are schemes inexhaustible, simplicity is the basis of beauty; as decoration is of magnificence; harmony is the result of the first, and proportion elegantly compos'd is the certain effect of the latter; and in these I have us'd all possible diligence to regulate the whole in the neatest and most exact manner, with regard as well to convenience, as to beauty and decoration.

When I began this work, I intended only 15 defigns for small edifices, from 2001. to 7001. value, but by the advices of some friends who approv'd of what I had begun, I have added to

them 16 defigns more: The value of the largest of which does not exceed 6000 l.

And in order to render those designs more universally useful, as well to artificers concern'd in building, as to gentlemen and others of higher dignity, I have made estimates of each design; calculated by the magnitude of the plan, by the area or great square, and in this I think, I can safely say; the difference in the expence of building in most parts of England or Ireland, where a gentleman is oblig'd to buy his materials, will be little more than 5 pound in 100%, this by observation and experience in many parts, upwards of 20 years being employ'd therein, I can with the greater certainty affert.

When I had finith'd these designs, I consider'd the usefulness of some orders, and proportions necessary for piers, and gates, for entrances to courts, gardens, &c. and these I have re-

gulated

PREFACE.

gulated and proportion'd in a method entirely new, and I have prefix'd them to the work as a preparatory introduction in 12 plates; also one plate shewing the use of architectonick rules,

which is more methodically explain'd in the latter part of this book.

The drawings of the whole being compleated, and having time on my hands, curiofity led me to view the funk pier of the new bridge at Westminster (which was the first time I was on that work) an accident or misfortune of that kind, in so great a structure, and which was erected for publick utility, put me immediately upon thinking how the evil might be remedied, and prevent any future mischance to that noble design; the result of these thoughts was the scheme I annex'd at the end of the work, being a prespective view of the 2 arches adjoining, and the funk pier with the truss, &c. intending to secure them. This I laid before the right honourable and honourable the commissioners of the bridge for their consideration, and shall with pleasure think myself well employ'd, if my sentiments in the whole or in part may be found useful as one of fociety; every individual has a right to contribute his fentiments for the publick good; and if mine may be thought worthy their notice, I have done no more than the duty of every being in community, though it should not any thing contribute to my own immediate interest.

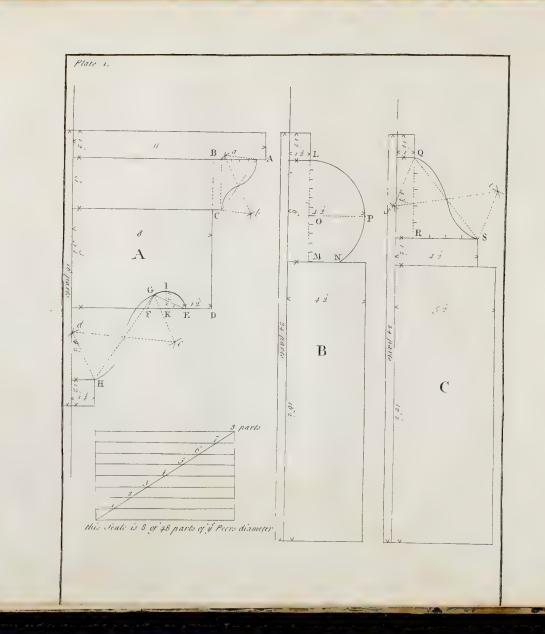
These are the principal things I have to say on this subject, and I hope my explanations and remarks on so noble a Science as ARCHITECTURE, and properly introduc'd, I have found an innocent and agreeable amusement in the composition of them, as I hope the reader will in the perusal; and whatever may farther contribute to it in this science, I may perhaps in some future essay attempt to lay before the publick: But before I conclude, I beg leave to acknowledge my gratitude to my ingenious friend Mr. Robert Morrice architect, to whom I communicated my defigns, who gave me his friendly opinion on the fame and am his and the

publicks

Most obedient bumble Servant,

William Halfpenny.





OF NEW PLANS. VARIETY AND

ELEVATIONS OF BUILDINGS,

WITH

Piers and Gates suitable to the several Entrances into Courts, Gardens, &c.

The proportion of the members are calculated from the width or diameter of the pier, as mark'd on each plan, which is divided into 48 equal parts by a diagonal scale, and the feveral mouldings are drawn at large in the four following plates.

PLATE L

Shews the cornice and base mouldings to the two piers in plate VII.



curves are struck from the intersecting arches a b, and the and projections of all the members are measured by the corona projects 8 parts, whose lip D E is $1 \frac{1}{2}$, and diagonal scale as figured on the draughts.

H E cornice A is $\frac{1}{3}$ of the diameter of 16 I from E to K the center of the throat, from whence parts thick, and projects 11; AB is equal firike the semicircle EIF; then divide the quadrant IF to B C, and is divided into 6 equal parts; I into 2 equal Parts as at G, and fet on the fillet at H, draw is given to the projection of the fillet at A, the line GH, then describe the curve of the cima recta and 1 to the foot of the cima reversa at C, the from the intersecting arches c and d. The thicknesses

The

The base B is half a diameter, or 24 parts thick, and projects $4\frac{1}{2}$; lay down the strait lines of the members, and describe the curve of the torus: draw the dotted lines L M, which divide into 11 equal parts, the fixth from L, as at O, is the centure of the curve L P N, and P will be perpendicular over the face of the plinth.

The base C is half a diameter or 24 parts thick, and projects $5\frac{1}{2}$; its several members are mark'd on the draught, whose strait lines must first be laid down, and the cima reversa described: draw the dotted hipothenuse line 2S, and middle it; then strike the intersecting arches at e and f, which are the centers of the curves 2S; and RS will be found equal to 4 of 2R.

PLATE II.

The Base D is half a diameter or 24 parts thick, and projects $6\frac{1}{2}$; the several members are figured in the draught, whose strait lines must first be laid down; then describe the curves of the cima reversa, and torus: draw the dotted line AC and middle it, then strike the arches a and b, which are the centers of the curves AC, and the line BC will be equal to $\frac{1}{3}$ of AB. To describe the curve of the torus, draw DE, which divide into 11 equal parts, the 6th from D, as at G is the center of D HF, and H will be perpendicular over the face of the plinth.

The cornice E is $\frac{1}{3}$ of a diameter or 16 parts thick, and projects 10 $\frac{1}{2}$; and the several members are figured on the draught: ST and SI are equal: and the curves of the cima recta IT, are described from the intersecting arches cd.

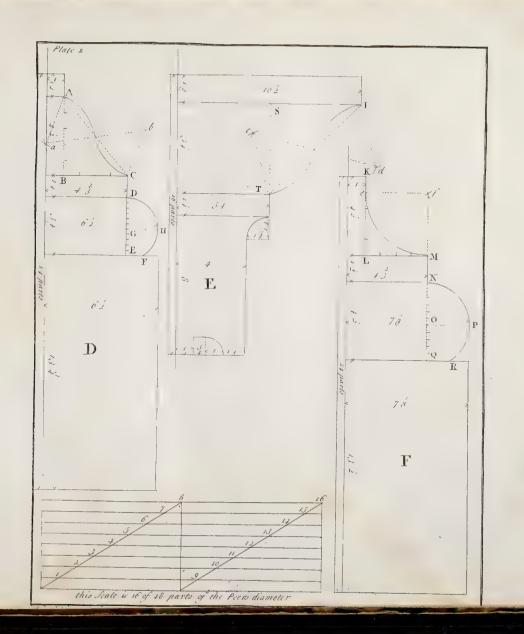
The base F is half a diameter or 24 parts thick, and projects $7^{\frac{1}{4}}$; and the several members are figured on the draught, whose strait lines must be laid down, then describe the curves of the cavetto and torus thus: draw the perpendicular line KL, which will be found $\frac{1}{5}$ longer than LM, then take LM and strike an arch at f; intersect the same from e, which is the center of the curve Me, and the remainder e K is a strait line; again, let fall the perpendicular line N, and divide it into 11 equal parts, the 6th from N as at O, is the center of NPR, and P will be perpendicular over the sace of the plinth.

PLATE III.

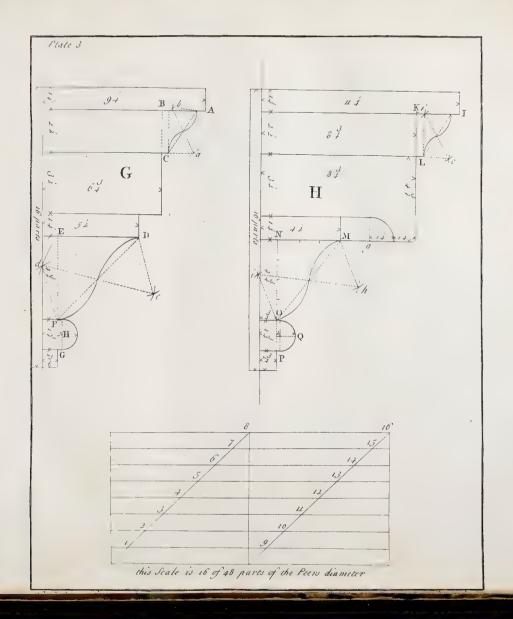
Shews two different cornices to the piers in plates IX, X, and XI.

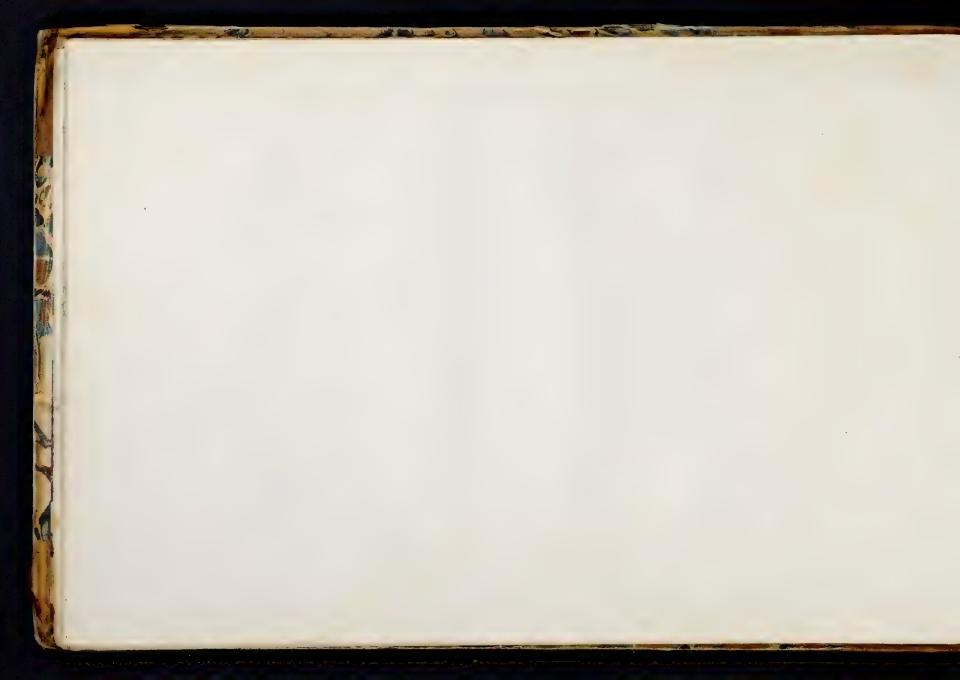
The E cornice G is $\frac{1}{3}$ of a diameter thick, and projects $g \stackrel{!}{=} AB$ is equal to BC, and is divided into 6 equal parts, 1 is given to the projection of the fillet at A, and 1 to the foot of the cima reversa at C, and 4 remains to its moulding, the curve is describ'd from a and b: draw EF perpendicular over the face of the lower fillet, which will be found equal to ED; then middle the hipothenuse line DF, and describe the intersecting arches at c and d, from whence strike the curves FD; then set on $\frac{1}{8}$ of a part beyond the face of the lower fillet, as described by the dotted line G, which middle as at H, and strike the nose of the bead, whose projection is $\frac{1}{8}$ of a part more than a semicircle.

The cornice H is $\frac{1}{2}$ of a diameter or 16 parts thick, and project 11 $\frac{1}{4}$; and the several members are marked on the draught. IK and IL are equal, and the curves are struck from e and f; the corona projects $8\frac{5}{4}$, from whence set back $1\frac{1}{4}$ for its lip, and $1\frac{1}{4}$ for the center of the throat as at g; rise the perpendicular ON over the sace of the

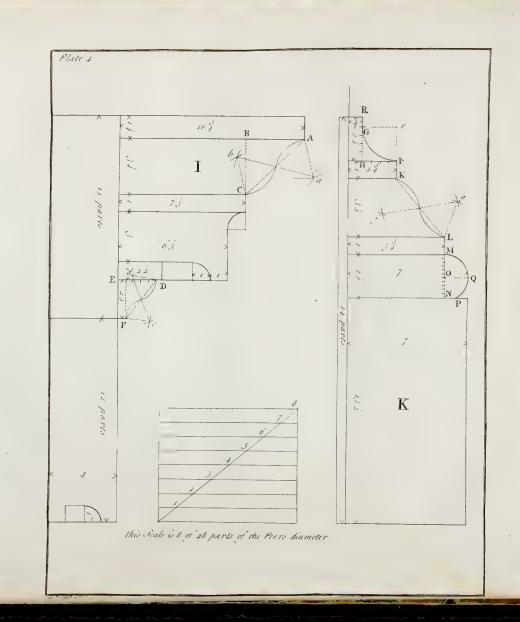




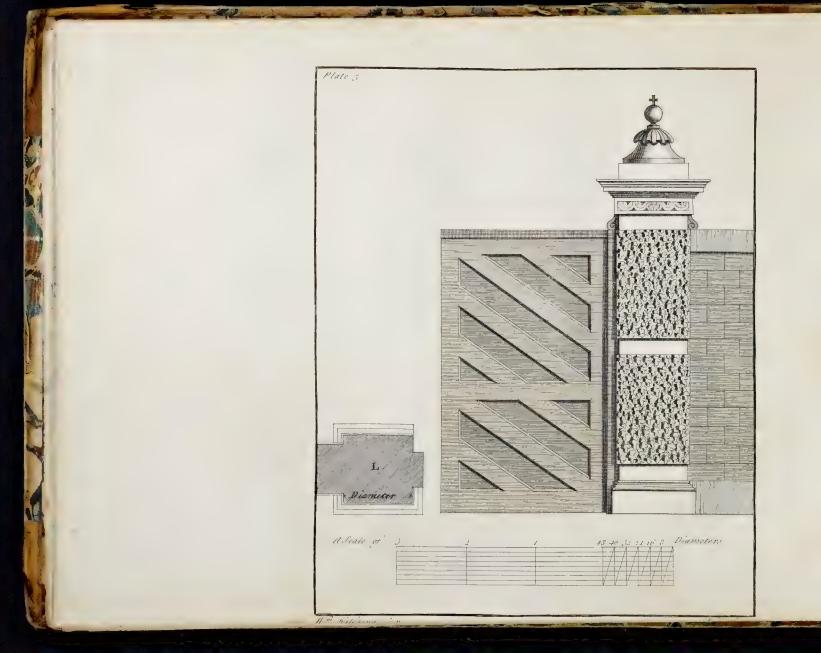




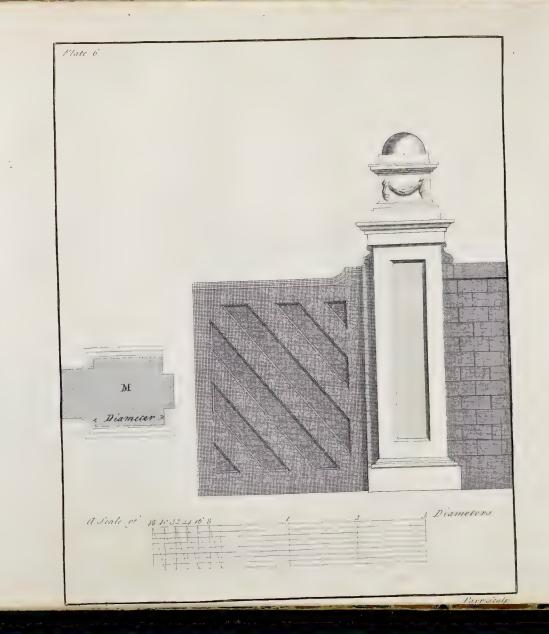




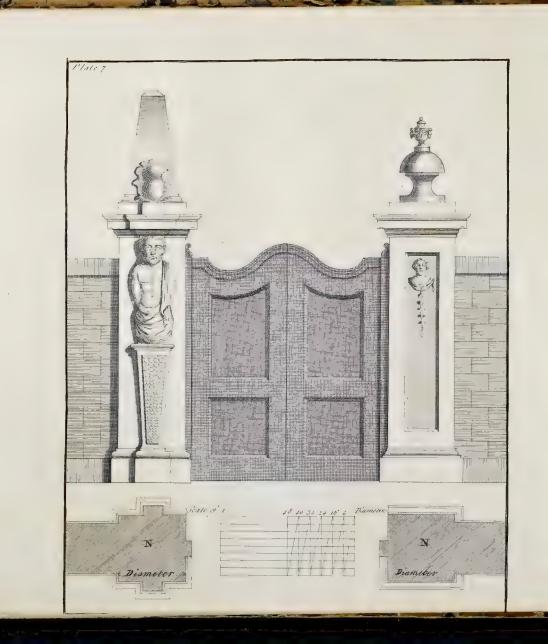












lower fillet, then will NM be $\frac{1}{4}$ of NO: draw the line OM, and strike the intersecting arches at i and b, from whence describe the cima recta OM, then add $\frac{1}{3}$ of a part to the projection of the bead, as the dotted line P, and strike its curve O2P.

PLATE IV.

Shews the cornice to the piers in plates V, VII, and XII. and a base moulding, which may be used at discretion to

either of the large piers.

HE cornice I is $\frac{1}{4}$ of a diameter, or 12 parts thick, and projects beyond its facia 10 and $\frac{1}{4}$; the latter is the fame thickness, and projects 4, and the several members are mark'd on the draught, AB is equal to BC, and the cima recta is describ'd from the intersecting arches at a and b, also ED and EF are equal, and the cima reverse ED is struck from the curves at C and D.

The base K his half a diameter, or 24 parts thick, and projects 7, and the several members are mark'd on the draught, whose straight lines must be drawn, then the different curves, first IG from e, and the cima reversa KL from the intersections at f and g: then draw MN, which divide into 11 equal parts, and the 6th from M as at O is the center of the torus MQP, and Q will be perpendicular over the plinth.

PLATE V.

Shews the plan and elevation of a rustick pier, with a gate fram'd or battin'd in a diagonal position, adapted to the entrance into a Court or Garden. See the plan mark'd L, with its diameter and diagonal scale of 48 parts.

THIS pier is 4 diameters and 40 parts high from the bottom bed of the plinth to the upper bed of the cornice; the base is half a diameter high, and the

cornice with the facia the fame, the feveral proportions of the latter are taken from I plate IV. and those of the base from D or F plate II; the margents on the pier is 12 parts each, and the projection of the rusticks from the body, if plain, is 2 parts, and if frosted 3, all the other parts may be measured by the scale.

See the gate. This manner of framing is much stronger, and less subject to swag than in the common way, and is

a good method for doors to offices, &c.

PLATE VI.

Shews the plan and elevation of a plain pier, and diagonal fram'd or battin'd gate, suitable to the entrance into a Court or Garden. See the plan M with the diameter, &c.

THIS pier is 4 diameters high from the bottom bed of the plinth to the upper bed of the cornice, the base is half a diameter thick, and the cornice $\frac{1}{3}$; and their several proportions are taken from ED or EF, plate II. the margents on the fronts of the pier is 12 parts wide, and the pannels 24, all the other measures may be known by the diagonal scale.

PLATE VII.

Shews the plans and elevations of two piers sutiable to the entrance into the front Court or Garden, &c. of a well finish'd building. See the plans N N with their diameters.

THESE piers are each 4 diameters high, from the bottom bed of the plinth to the upper bed of the cornice; their bases is $\frac{1}{2}$ a diameter thick, and their cornices $\frac{3}{4}$; and the several proportions are taken from ABC plate I. These and all the other parts may be measured by the scale.

PLATE

PLATE VIII.

Shews the plans and elevations of 2 piers, adapted to the entrance into the front Court, or Garden, &c. of a well finish d building. See the plan O with its diameter equal to both piers.

THESE piers are each 6 diameters high from the bottam bed of the plinth to the top of the cornice; their base is $\frac{1}{2}$ a diameter thick, and their cornice and sacia the same; their several proportions are taken from IK plate IV. and all the other measures may be known by the scale.

PLATE IX.

Shows the plan and elevation of a ruftick pier, proper for the entrance into the Gardens, &c. of a well finished building. See the plan P with its diameter.

THIS pier is 4 diameters and 30 parts high from the bottom bed of the plinth to the top of the cornice; its base is $\frac{1}{2}$ a diameter thick, and its cornice $\frac{1}{3}$; the several proportions of the base is taken from D, plate II. and those of the cornice from G or H, plate III. all the other parts may be measured by the scale.

PLATE X.

Shews the pian and elevatian of a ruftick pier, fuitable for the entrance into the outer court of a building, where gravity is the proper symbol, such as Bishops Palaces, Halls for suffices, &cc. See the plan Q with its diameter.

T HIS pier is 5 diameters high from the bottom bed of the plinth to the top of the cornice; its base is ½ a

diameter thick, and its cornice $\frac{1}{3}$; the proportions of the base are taken from D, plate II. ar K, plate IV. and those of the cornice from G or H, plate III. the other parts may be measured by the scale.

PLATE XI.

Shews the plan and elevation of a ruftick pier, proper for the entrance into the outer court of a building whose characteristick is to represent defence, viz. the dwellings of Admirals, Governors of garrisons, &c. See the plan R with its diameter.

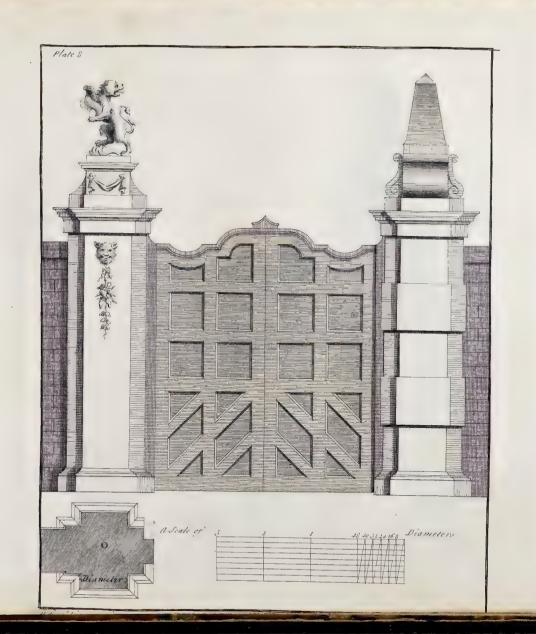
THIS pier is 5 diameters and $\frac{1}{3}$ high from the bottom bed of the plinth to the top of the cornice; its base is $\frac{1}{2}$ a diameter thick, and its cornice $\frac{3}{3}$; the several proportions in the base are taken from D, plate II. or K, plate IV. and those of the cornice from G or H, plate III. all the other parts may be measured by the scale.

PLATE XII.

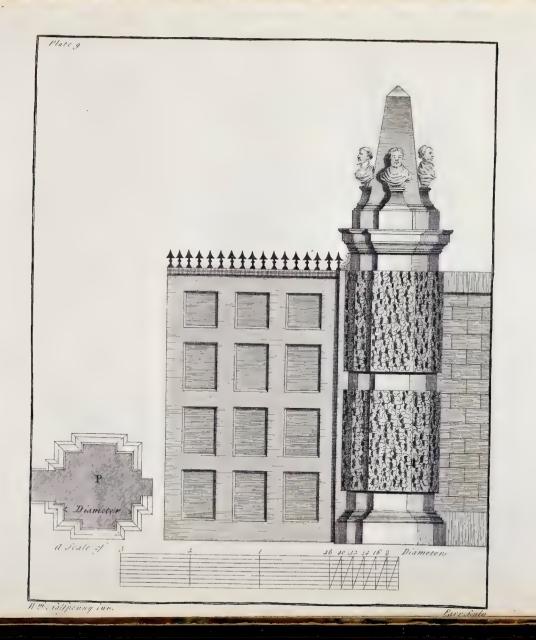
Shews the plan and elevation of the pier, suitable for the entrance into the outer court of a Nobleman or Gentleman's dwelling, where hospitality and grandeur are the proper emblems. See the plan S with its diameter.

THIS pier is 5 diameters high, from the bottom bed of the plinth to the top of the cornice; its base is $\frac{1}{2}$ a diameter thick, and the cornice with its sascia the same; their several proportions are taken from I and K, plate IV. and all the other parts may be measured by the scale.

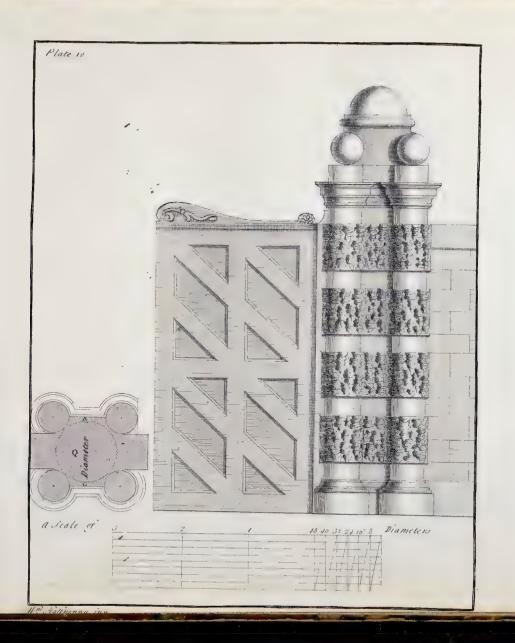
PLATE



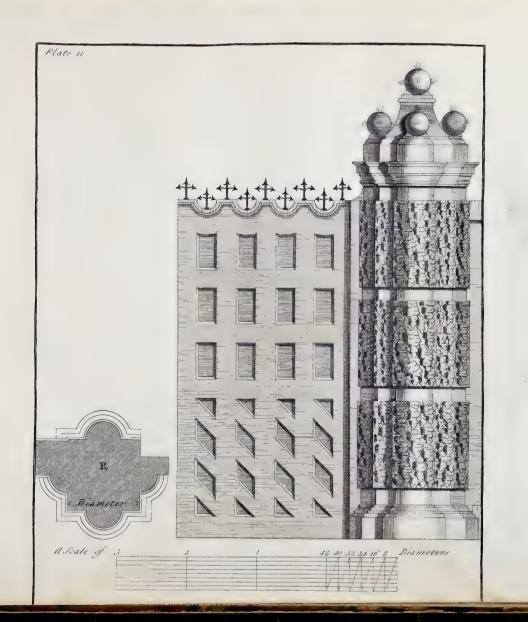




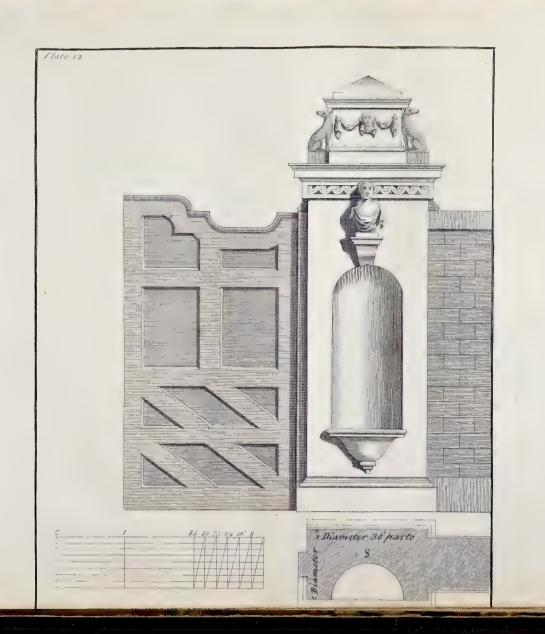
















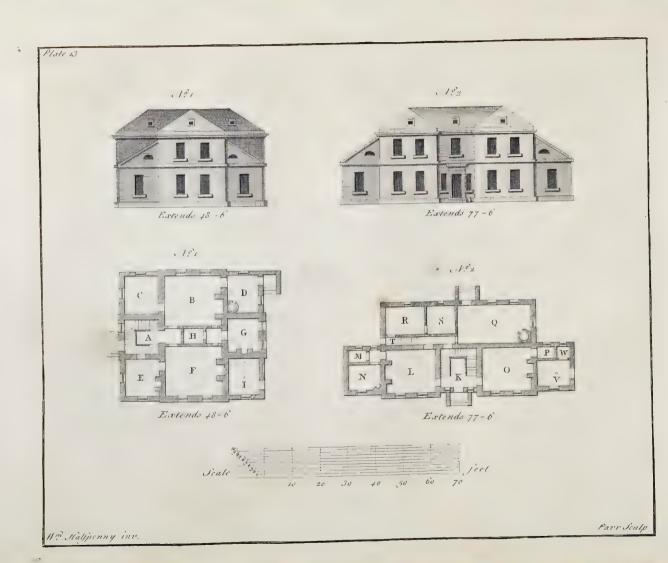


PLATE XIII. No 1.

The plan and elevation of a defign for a house 48 feet 6 inches front, and 47 feet 6 inches deep, divided into rooms, &c. in the following manner.

AHALL and stairs 12 feet by 12 feet.

B Kitchen 20 feet by 18 feet.

C Larder, &c. 13 feet by 12 feet.

D Scullery, &c. ditto. E Little parlour, ditto.

F Great, ditto, 20 feet by 18 feet.

G Study, &c. 12 feet by 12 feet.

H Dark closet 7 feet by 6 feet.

1 Stable 13 feet by 12 feet.

The parlour story is 12 feet high in the clear, and that of the chambers over B F G 10 feet, but those over G D E I are no other than sheaded losts; see the front.

There are supposed to be vaulted cellars under ABC, whose floor ought not to be less than 5 feet 6 inches below the surface of the earth; the walls which rise two stories to be 2 feet 6 inches thick, from the soundation to the top bed of the front plinth (not including an offset of 6 inches to bear the vaulted arches) and from thence upwards two feet thick.

The front walls of GDIF need be no more than 2 feet thick, from the foundation to the top bed of the plinth, and I foot 6 inches from thence upwards.

If the building be carried up of brick, the foundation of those walls which rises 2 stories ought to be three in length to the top bed of the plinth, and from thence upwards 2; but the front walls of the sheads need be no more than 2 bricks thick to the top bed of the plinth, and from thence upwards 1 ½.

That part of the house mark'd ABGF, which rises 2 stories above the parlour floor, with garrets over, contains 15 square \(\frac{1}{4}\), and may be built in a strong and middle sinish'd manner for 35 l. per square. Those parts mark'd CDIE, which rises one story, and losts over them contains 8 square, and may be built in proportion to the other at 20 l. per square.

15 square \(\frac{1}{4}\) at 35 l. per square, \(-\frac{551}{160}\) o

Total expence, \(\frac{711}{5}\)

Nº 2.

The plan and elevation of a delign for a fingle house 77 feet 6 inches front, 2 stories high, with garrets, and sheads for offices on each wing, and the whole length of the back front; which is divided in the following manner.

KHALL and stairs 14 feet by 13 feet.

L Kitchen 18 feet by 16 feet,

M Pantry 7 feet 6 inches by 4 feet.

N Study or closet 12 feet by 10 feet.

O Parlour 18 feet by 16 feet.

P Closet 7 feet by 4 feet.

9 Brewhouse for 26 feet by 14

2 Brewhouse, &c. 26 feet by 14 feet. R Half sunk cellar 14 feet by 10 feet.

S Ditto 10 feet 6 inches by 10 feet.

T Cellar, steps.

V Stable 12 feet by 10 feet.

W Saddle room 4 feet 6 inches by 4 feet.

The kitchen, hall, and parlour LKO are 12 feet high in the clear, and the chambers over them 10 feet; all the

C

floors over the sheaded rooms are 2 feet lower than those of the chambers, to gain the better headway in the losts over them, except the brewhouse 2, which is clear up to the roof, in order to carry off the steem, &c. The walls are supposed to be built like those of N° 1.

Estimate to Nº 2.

The body of the house L K O contains 10 square $\frac{1}{2}$, and may be built in a strong and middle finish'd manner for 34 L per square.

The sheaded parts NRSQV contains 13 square $\frac{1}{2}$, and may be built at 18 l. per square.

10 square \(\frac{1}{2}\), at 34 l. per square, \(-\frac{1}{2}\) 357 \(\cdot\)
13 square \(\frac{1}{1}\), at 18 l. per square, \(-\frac{1}{2}\)

Total expence 600 0

PLATE XIV. Nº 3.

The plan and elivation of a defign for a house of 56 feet 6 inches front, two stories high, and garrets, with cellars under the kitchen and parlour, and is divided in the following manner.

ADASSAGE 5 feet 6 inches wide.

Stairs and back passage 12 feet by 10 feet.

C Kitchen 18 feet by 18 feet.

D Larder 10 feet by 10 feet.

E Parlour 18 feet by 18 feet.

F Study or closet 10 feet by 10 feet.

The parlour story is 11 feet high in the clear, and the chambers 10 feet, and a closet may be made over \mathcal{A} to each front chamber. The walls are supposed to be equal in thickness to those of N° 1.

Estimate to No 3.

This Plan contains 15 square $\frac{1}{2}$, and may be built in a middle finish'd manner for 33% per square, which amounts to 511%. 10 s.

Nº 4.

The plan and elevations of a design for a house 48 feet in front, and 44 feet 6 inches deep; over HLG is three stories high, and the middle of the back front over P two stories, and sheads on each side mark'd IKON, over which losts may be made for servant's bed-rooms; the cellars are supposed to be under HLG vaulted with brick or stone. The ground stories divided in the following manner.

G PASSAGES and stairs, 6 feet 6 inches wide,

H Kitchen 18 feet by 15 feet.

I Pantry 5 feet 6 inches by 4 feet.

K Larden 1 feet 6 inches by 10 feet.

L Parlour 18 feet by 15 feet.

M Closet 6 feet 6 inches by 5 feet 5 inches.

N Paffage 4 feet wide.

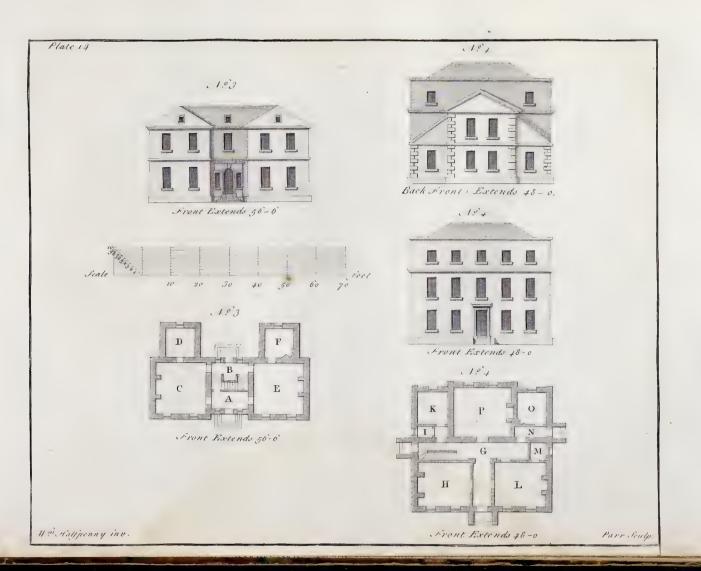
O Study 11 feet 6 inches by 10 feet.

P Dining room 20 feet by 18 feet.

The parlour ftory is 11 feet high in the clear, the chambers 10, and the attick 8 feet: there is three bed-chambers over HLP, with a closet over the front passage, and lofts over KO, to be come at from a passage over G; the attick story may be divided into three rooms.

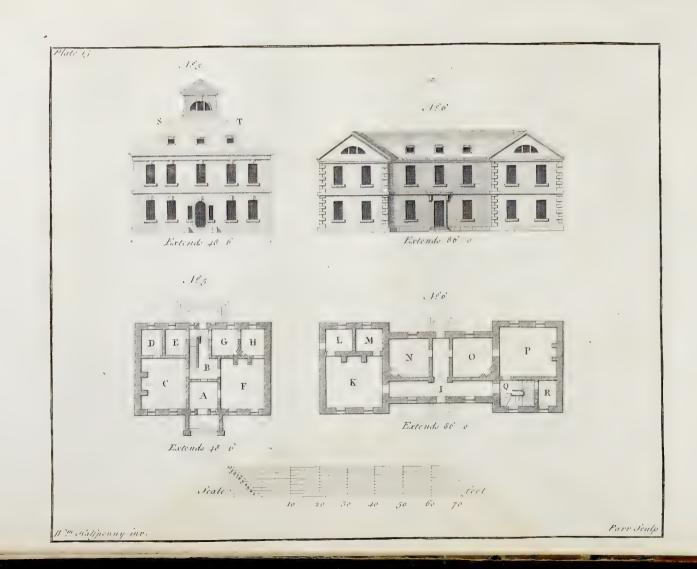
The Estimate to Nº 4.

The front part of this plan mark'd HLG contains 11 fquare $\frac{1}{2}$, has vaulted cellars below, and is 3 ftories high, above ground, which may be built in a ftrong and midling plain finish'd manner, at 36 pounds per square; the part









part mark'd P is 2 stories high without cellars, contains rooms, only with this difference; the door of the room s square 1, which may be built for 26 pounds per square; the 2 angles IKNO is one story high, with lofts over them, which contains 4 square 1, and may be built for 18 pound per square.

11 Square 5 Square	at 36 l. per at 26 l. per		Billioninshounds gameles Serversey	£. 414 136	
	at 18% per		-	78	
		Total expence.		628	

PLATE XV. Nº 5.

The plan and elevation of a design for a bouse 48 feet 6 inches front, and 32 feet deep, 2 stories high, with vaulted cellars under 1 the building, and garrets in the roof; over which is a gazebo room 10 feet square, whose floor is level with the dotted line S T; leading to which there may be a narrow pair of stairs from the garret, to land on one side of the room, which may be cover'd by a table leaf, to turn up as a person ascends, then turned down and used as a table or side-board. The plan is divided in the following manner.

AHALL 10 feet by 10 feet. B Passage 10 feet wide at entrance, and 7 feet 6 inches wide at the stairs.

C Kitchen 18 feet by 16 feet 6 inches. D Larder 10 feet 6 inches by 8 feet.

E Pantry ditto.

F Parlour 18 feet by 16 feet 6 inches. G Ditto 10 feet 6 inches by 10 feet.

H Study or closet 10 feet 6 inches by 8 feet 6 inches.

The parlour and chamber stories are each 12 feet high in the clear, and must be divided into the same number of

over E be fix'd next the stairs, and that in the room over G will be better in the break of the passage over B. The middle partitions must be continued up to the Line S T in order to bear the gazebo room.

Estimate to Nº 5.

The whole plan contains 16 fquare, and may be built in a strong and middling plain finish'd manner for 36 l. per square, which amounts to 5761.

Nº 6.

The plan and elevation of a defign for a house 86 feet front. and 32 feet 6 inches deep, 2 stories high, with vaulted cellars under OPQR, and part of the passage I, and garrets in the roof. The plan is divided in the following manner.

I DAssage 6 feet wide. K Kitchen 20 feet by 18 feet.

L Scullery 9 feet 9 inches by 8 feet. M Larder ditto.

N Parlour 15 feet 3 inches by 14 feet.

O Ditto. P Dining room 20 feet by 18 feet. 2 Stairs 13 feet by 9 feet 6 inches.

R Pantry or closet 9 feet 6 inches by 6 feet 6 inches.

The parlour flory is 12 feet high in the clear, and that of the chambers 11 feet, and must be divided in the same manner as that below, only with this difference; the room over N may be so much longer as the width of the cross passage, and thickness of one of the partitions; the room over M may have a small chimney and a door fix'd, which will make a dreffing closet to that bed chamber; that over R must be made a closet for the room over P,

because

because there cannot well be any other entrance thereto.

Estimate to Nº 6.

The whole plan contains 24 square, and $\frac{1}{2}$, and may be built in a strong and middle plain finish'd manner for 34 pound per square which amounts to 833 pounds.

PLATE XVI. Nº 7.

The plan and elevation of a defign for a house 51 feet front, and the same depth, is 2 stories high with vaulted cellars under ABCDE, and garrets in the roof, the plan is divided as follows.

A HALL 28 feet, by 18 feet and stairs 17 feet 6 inches by 14 feet.

B Kitchen 20 feet by 18 feet.

C Larder 10 feet 6 inches by 7 feet.

D Dark room 7 feet by 7 feet.

E Little parlour or study 13 feet 6 inches by 10 feet.

F Great Ditto 18 feet by 17 feet.

G Dining room 20 feet 6 inches by 18 feet.

The parlour story is 12 feet high in the clear, and the chambers 11, the latter may be divided into 6 rooms, but the most commodious is to make a bed-room over B. with a dreffing and dark closet over C and D; also a room over G with a dreffing room, whose windows shall be over the back front door, and fingle rooms over E and F.

The stairs must begin next the front, otherwise there will not be head-way to land in the garrets, except small stairs be made for that purpose, which may be done between the drefling closer to the room over G, and the gallery over A, therefore it's best to begin the stairs next the rooms, E not only for the conveniency of being nearer the parlour and back passage; the entrance into the loft the parlours, but the kitchen and the cellar stairs will be over N must be from the half pace of the stairs, whose much more private.

If other offices be wanted they may be built on the flanks of the house and cover'd with sheaded roofs, or if the ground be dry, and healthy, they may be made in the cellars.

Estimate to Nº 7.

This plan measures 26 square, and may be built in a strong and middle finish'd manner for 35 pounds per square, which amounts to 910 pounds.

Nº 8.

The plan and elevation of a defign for a fingle house, and offices 74 feet 6 inches front, is 2 stories high and a cellar under L, with garrets in the roofs, and lofts over the Sheaded offices, the plan is divided as follows.

H Ront court which rifes 2 feet above the surface Porch or entrance.

K Paffage 6 feet 6 inches wide, and stairs 2 feet going.

L Kitchen 14 feet by 13 feet 6 inches.

M Pantry 5 feet 9 inches by 5 feet. N Common kitchen 13 feet by 12 feet.

O Ditto pantry 4 feet o inches by 5 feet.

P Parlour 20 feet by 20 feet with a recess for a bed or fide-board, 8 feet 6 inches by 6 feet.

2 Closet or study 7 feet 6 inches by 7 feet.

R Master's closet or counting house to do business with workmen, &c. for which conveniency a small window may open into the porch I.

S Stable 12 feet by 10 feet.

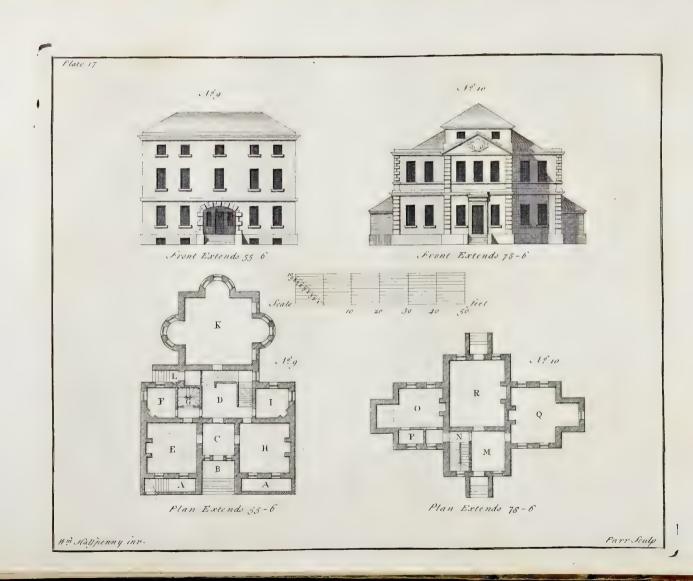
T Saddle room 7 feet 6 inches by 4 feet 2 inches.

The parlour and chamber stories are each 12 feet high in the clear, the latter may be divided into two bed rooms, the one over P, and the other over L, with the recess of floor

Plate 16 107 108 Extendo 51 - 0 Extends 74-6 Scale > E 20 30 . 107 108 F Extendo 77 6 Extends 51-0 W. Malfpenny inv. Parr Sculp







floor may be brought down to the head of the common K Great room 24 feet by 24 feet, not including the rekitchen windows, to make better headway; and that over the stable likewise; which may be observed in all theaded offices of this kind.

Estimate to N: 8.

The body of this house contains it square, which may be built in a substantial and middle finished manner for 32 pounds per square; the sheaded offices and porch contains 7 square 1, at 15 pounds per square.

11 square, at 32 l. per square. — 352 1 Ditto 1, at 15 l. per square. — — 112 10

Total expence 464 10

N. B. The value of the court walls with its steps and pavement is computed in the whole.

PLATE XVII. Nº 9.

The plan and clevation of a design for a house 55 feet 6 inches front, is a stories ! high, turned with well burn'd brick, in order to help the found of mufick; the kitchen and other offices are under the body of the house; and the parlour plan is divided as follows.

AA Reas and steps leading to the lower offices.

Halfpace or landing of the front steps under cover of an archade.

CHall 11 feet by 11 feet.

D Lobby and great stairs 18 feet by 16 feet 6 inches.

E Parlour 18 feet by 18 feet.

F Closet 11 feet by 10 feet.

G Back stairs.

H Parlour 18 feet by 18 feet.

I Breakfast parlour 11 feet & inches by 11 feet.

ceffes of the bow windows which are o feet wide and 6 feet deep.

L Back door and steps into the garden, &c.

The plinth in front is 4 feet high, and its top bed is level with the parlour floor, from whence take one foot 4 inches for the crown of the arch, with joift and boarding, and 2 feet 8 inches remains for the ceiling of the offices above the furface; then fink the floor 4 feet 10 inches below the furface, and their hight will be 7 feet 6 inches in the clear; the kitchen may be under K groin'd over from angle to angle, and its chimney under the bow window to the right; a larder may be made under one of the bow windows, and a scullery under the other; and windows may be made in the fquare wall, to give light to the kitchen; the front entrance into the offices must be at the foot of the steps in the area against A, leading into the fervants hall under E; the butlers pantry under F: the house-keepers room under I; a dark cellar under CRand a light cellar under H, with an open paffage under D, lighted by a window in the angle. Note, an other entrance may be made by the fide of either chimney under E.

The hight of the parlour and chamber story, is 12 feet in the clear, and the attick 8 feet.

The great room K is supposed to be 24 feet in the clear, with a cov'd ceiling of 4 feet 1 high, and the fame projection, with an impost moulding of 12 inches at the foot, and a colloss of 10 inches at the head; the room to be wainfcotted 4 feet high, it's base to be 10 inches, and the capping 5 inches; the recesses of the bow windows, to be made in the nature or plain netches, and their crown to be g inches below the foot of the impost, at the bottom of the cove; a gallery for mufick is supposed to be fixed on corbles over the door of the great room, and the entrance thereto must be from the great stairs.

Estimate to No.9.

The plan measures 30 square, at 40 pounds per square, which amounts to 1200 pounds.

Nº 10.

The plan and elevation of a design for a house 78 feet 6 inches front, and 44 feet deep and is divided in the following manner.

MHALL 14 feet by 12 feet 6 inches.
N H Stairs 7 feet wide.

O Parlour 17 feet by 14 feet 6 inches, with a recess of o feet o inches by o feet for a closet.

P Closet 8 feet by 5 feet.

2 Dining room 20 feet by 16 feet, with a recess for a KKKK Opening to Archades.

fide-board ofeet by o feet,

kitchen under R; the fervants hall under M; butlers pantry under P; larders and house keepers room under O, and cellars under 2.

The parlour story is 14 feet high in the clear, and the chambers 12, and the attick which runs through the middle of the house over MNR is 8 feet high.

Estimate to No 10.

The middle part of this house contains 10 square 1/2, and may be built in a strong middle finish'd manner for 44 pounds per square.

The two fides contains 3 square 3, at 40 pounds per fquare; the two sheads contains 2 square at 20 pounds

per square.

p	£.	5.
10 square \(\frac{1}{2}\), at 44 \(l.\) per spuare, \(\)	462	0
8 ditto ¹ / ₄ , at 40 l, per square. — —	350	0
2 ditto at 20 l. per square.	40	0
	852	0

PLATE XVIII. No 11.

The plan and elevations of a design for an octagon lodge or summer-bouse.

A G Reat room 24 feet diameter.

B Hall 10 feet cube,

C Parlour ditto.

D Stairs leading to the lower offices and lofts above.

E Bed room to feet cube.

F Closet.

GGG Archades to feet wide and 12 feet high.

H Front steps. I Archade ditto.

The great room is 20 feet high in the clear, the ceil-The offices is below, and may be divided thus; the ing to be cov'd 4 feet down, and the same projection, with a moulding of 10 inches at foot, and a colloss of 9 inches wide at the crown; the room to be wainscotted 4 feet high with a 10 inch moulded plinth and a 5 inch capp or waift moulding,

The kitchen is supposed to be under E FB; the butlers pantry under C; the fervants hall under A; and cellars with openings for light under G G G; and lofts for fervants

beds in the sheaded roofs over EFBC.

The great room is defign'd to be cover'd with a flat of lead, inclosed by a ballistrade, but in this design, there is no way of leading thereto, which if requir'd, a room may be rais'd over FBD, cover'd with a flat, level with the other, and inclos'd with the same kind of ballistrade; then the stairs may be carried up to land thereon; the sheaded roofs are suppos'd to be cover'd with slates.

N. B. The stairs leading up to the lofts must begin in the ball, and those leading to the offices must land in the passage, between B and C, otherwise headway will be want1.04



Front Extendo 52-6

1:04



Front Extends 52-6



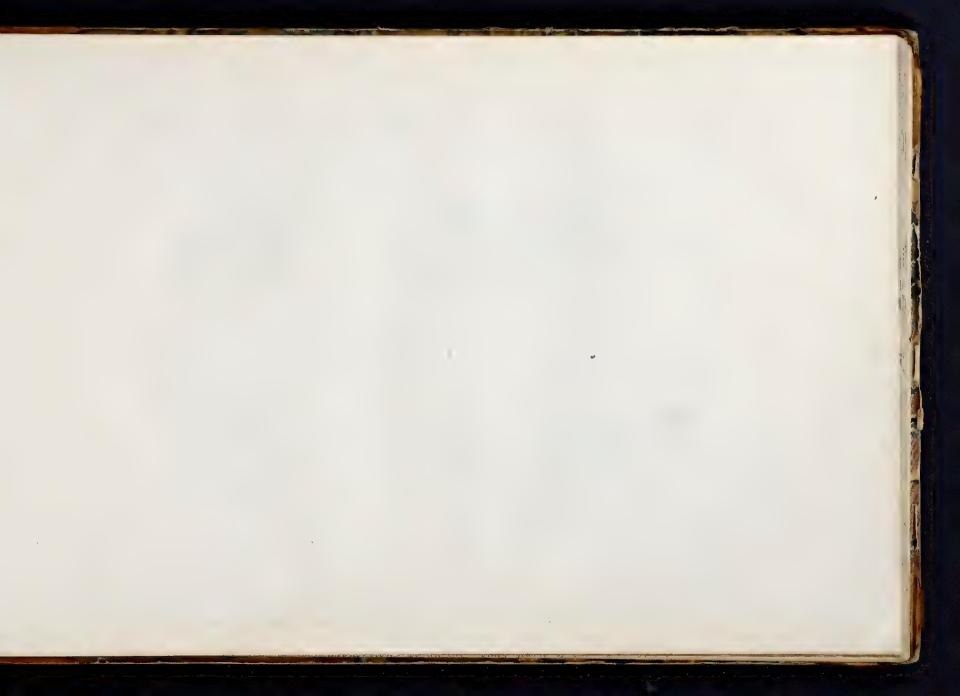
The Plan and Elevations

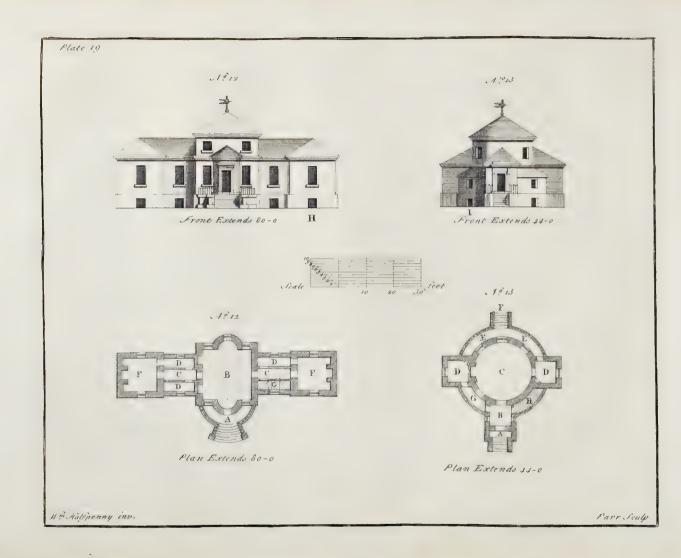


Plan Extendo 52-6.

K of an Octagon Summer house







into above; and observe to bring down the floors of those lofts. 2 feet below the front cornice, and ceilings of the archades, for the take of headway, 10 feet being a sufficient height for the imall parlours, &c.

This plan contains 21 square 1, and may be built in a strong well finish'd manner, for 30 pound per square,

which amounts to 645 pounds.

PLATE XIX. Nº 12.

The plan and elevation of a defign for a lodge or summer-

A F Ront steps.

Great room 18 feet by 18 feet, and 12 feet high in the clear.

CC Paffages 3 feet 4 inches wide. DDD Closets 10 feet by 3 feet.

F Parlours 12 feet by 12 feet, and 10 feet high in the

G Stairs leading up to the bed room over B, and lofts in the roof over FFCC.

H (See front Is the outfide entrance into the fervants hall) from thence to the other offices.

The kitchen is intended under B; the cellar under F. I See front entrances to lower offices.

and proper pantries, &c, under DDD.

N. B. The stairs leading from the offices must land under the stairs G, close to the parlour door, and observe the floors over FCD are brought down 2 feet below that over B, to make headway above.

Estimate to No 12.

The middle part mark'd B contains 6 square, and may be built in a good workman like manner (including front steps) for 35 pounds per square, all the other parts contains 7 square 3, at 25 pound per square.

6 7	fquare, at 35 l. per square. fquare 4, at 25 l. per square.	£. 210 193	s. 0 15
	Total expence	403	15

Nº 13.

The plan and elevation of a defign for a circular summerboule.

A Ront steps.

Hall 8 feet by 8 feet, and 10 feet high in the

C Great room 20 feet diameter, and 20 feet high in the clear.

D D Little rooms 8 feet by 8, feet and 10 feet high in the clear.

E E Tarras not cover'd 3 feet 6 inches wide, inclos'd by an iron rail 3 feet high.

F Steps to ditto.

G Paffage 3 feet 6 inches wide and 7 feet high.

H Stairs to lower offices 3 feet 6 inches wide.

The kitchen is supposed to be under C, lighted by arches under the tarras E E, and pantries, cellar, &c. under D D B, with a passage at the lower entrance I, under G.

The great room ceiling to be cover'd 4 feet down, and the same projection, with a plain impost moulding of 9 inches at foot, and a colloss of 8 inches on the crown, and a moulded plinth of 9 inches round the room, with a waift moulding 4 inches wide, and 4 feet above the floor.

Estimate to No 13.

The room C with its walls contains 4 square $\frac{1}{2}$, and may be done in a good manner for 40 pounds per square.

The other parts including the tarras, and throwing in the value of the steps, contains 6 square, at 26 pounds per square.

4 square 1, at 40 l. per square. 6 square, at 26 l. per square.		180		
	Total expence	220	0	

PLATE XX. Nº 14.

The plan and elevation of a design for a chapel, with apartments for the chaplain, &c.

A FRont steps.
Archade portico 26 feet by 9 feet.

C Entrance of the chapel with a gallery over it for an organ, &c, level with the upper rooms.

D Body of the chapel 25 feet diameter.

E Study 18 feet by 12 feet. F Parlour 18 feet by 18 feet.

G Stairs leading to rooms over E F, and gallery over the parlour; the study E F is 12 feet high in the clear, and the rooms over them 8 feet.

The chapel is lighted by 3 vitruvian cimacircle windows, 7 feet diameter, whose fill ought to be not less than 4 feet above the crown of the nitches, and by 4 circular windows in the doom, at equal distance from each other.

Estimate to No 14.

The middle of the building BCD contains 14 fquare and may be built in a good middle finish'd manner for 70 pounds per square, including the value of the front steps.

The 2 wings contains 8 square and a half at 36 pounds per square.

14 square ½, at 70 l. per square. — 1015 0
8 square ½, at 36 l. per square. — 306 0

Total expence 1321 o
N. B. Vaulted cellars is intended under all the building.

Nº 15.

The plan and elevation of a defign for an octagon open summer-house with four small waiting rooms, &c. and the same number of collonades or portico's.

HHHH C Ollonades 9 feet wide.

IIII Waiting rooms 11 feet by 9 feet.

K Octagon room 24 feet diameter, lighted by 4 vitruvian windows above the collonades.

Estimate to No 15.

The middle room K with its walls contains 6 square, and may be built in a well finish'd manner for 55 pounds per square.

The waiting rooms and collonades contains II square

1, at 38 pounds per square.

6 square at 55 l. per square.

11 square 1/2, at 38 l. per square.

767

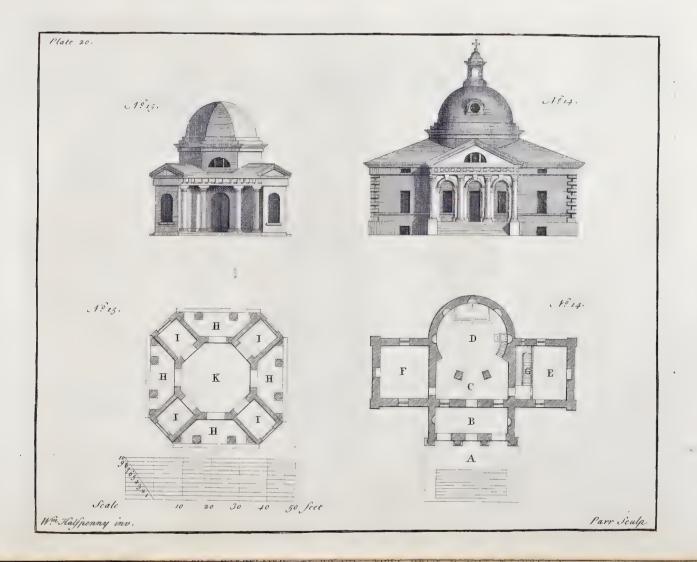
PLATE XXI. Nº 16.

The plan and elevation of a defign for a farm house, with its proper offices as follows.

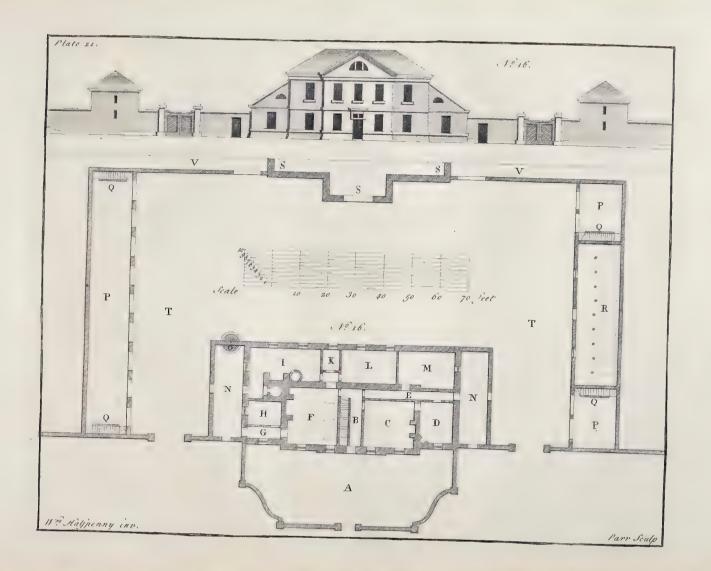
A L Ittle garden or court.

B Passage and stairs 8 feet wide.

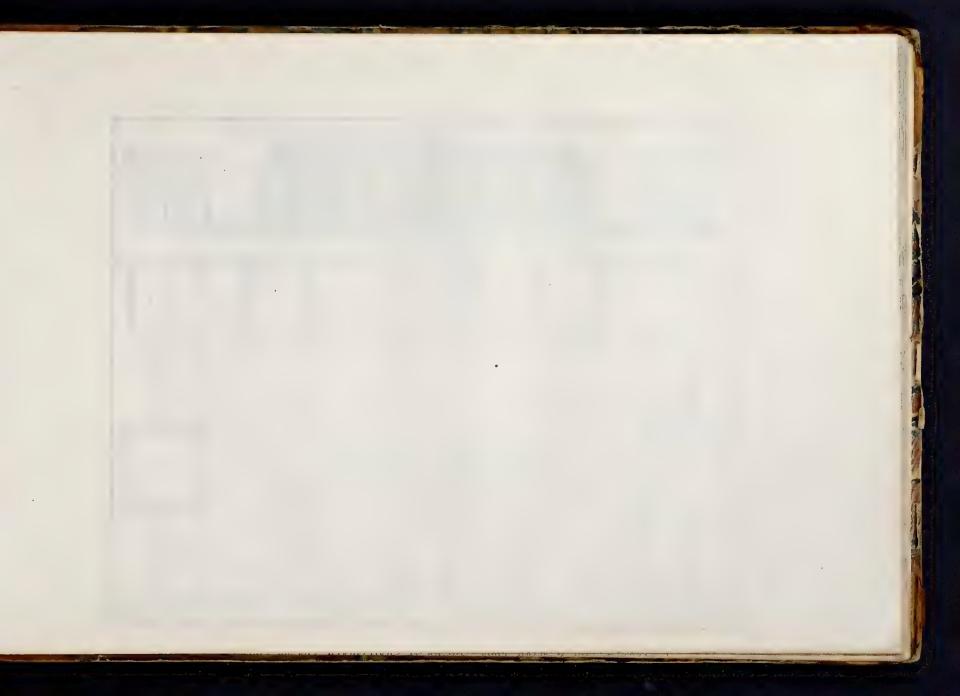
C Parlour

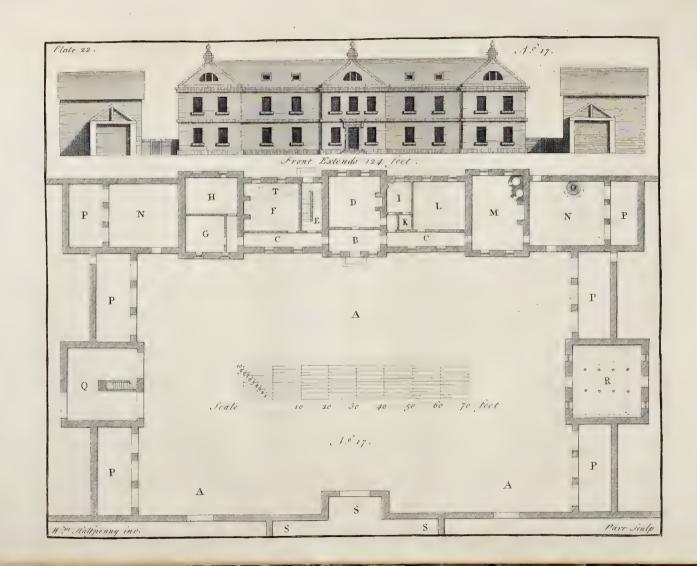


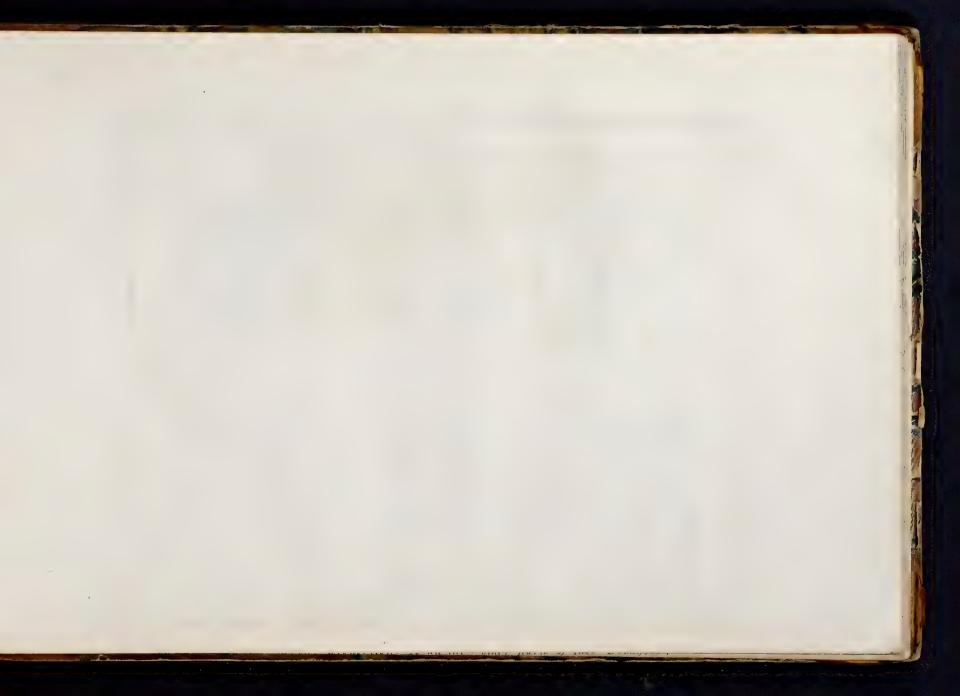


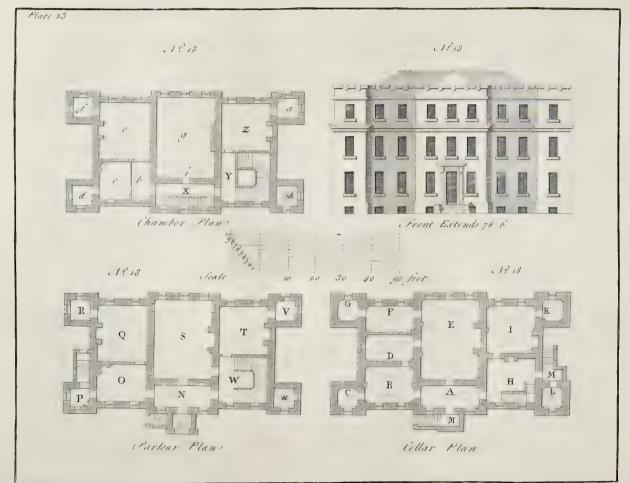












Il m Malipenny inv.

Parr Sculp

C Parlour 18 feet by 16 feet.

D Master's cellar or store room 14 feet by 12 feet.

E Passage 3 feet 6 inches wide.

F Kitchen 20 feet by 18 feet, with a long table represented by a dotted line.

G Passage A feet wide.

H Mistresses store room 12 feet by o feet.

1 Brew-house, bake-house, &c. 26 feet by 12 feet.

K Pantry 8 feet by 6 feet, L Dairy 20 feet by 12 feet

M Common cellar 20 feet by 12 feet.

N N Courts 10 feet wide.

O Well.

P Cart and cow-houses.

2222 Stairs to lofts over ditto and stables.

R Stables 16 feeet wide.

S Barn.

TT Ditto vard, &c. VV Reak yards, &c.

The body of the house FBC is two stories, of 10 feet each, with garrets in the roof, and GHIKLMD is no more than one story, with lofts in the sheaded roofs.

Estimate to No 16.

The body of the house contains 11 square 4, and may be built in a good workman like manner for 28 pounds per iquare.

The sheaded parts GHIKLMD, contains 13 square, at 18 pounds per iquare,

11 square 4, at 28 l. per square, 13 Iquare, at 18 l. per square.

Total expence 563 o

N. B. This house is suppos'd to be built on a spot where cellars can't be funk.

PLATE XXII. Nº 17.

Is the plan and elevation of a design for a gentleman's house, who is supposed to occupy his own estate.

AAA Ourt yard,

B Hall 18 feet by 8 feet,

C Passages 5 feet wide.

D Parlour 18 feet by 18 feet.

E Stairs 7 feet wide.

F Kitchen 20 feet by 18 feet, with a long table represented by a dotted line.

G Cellar 14 feet by 13 feet.

H Ditto 18 feet by 13 feet.

I Closet II feet by 8 feet.

K Dark closet.

L Dairy 19 feet by 18 feet.

M Brew-house 26 feet 6 inches by 18 feet.

NN Inner courts.

O Well.

PPPPPP Sheads.

2 Coach and cart houses.

R Stable.

SSS Barn.

The stories is each 10 feet in the clear, and garrets are

in the whole length of the roof.

The plan of the house contains 36 square, and may be built for 30 pounds per square, which amounts to 1080 pounds.

PLATE XXIII. Nº 18.

Is the cellar, parlour, and chamber plans, with the elevation of a house 78 feet 6 inches front,

See cellar Plan.

A PAffage 19 feet 6 inches by 7 feet 6 inches, B Cellar 16 feet 6 inches by 13 feet 2 inches. C Ditto

[14]

C Ditto 5 feet 6 inches by 5 feet 6 inches.

D Butler's pantry 16 feet 6 inches by 9 feet 5 inches.

E Kitchen 28 feet by 19 feet 6 inches.

F Scullery 16 feet 6 inches by 9 feet 5 inches. G Larder 5 feet 6 inches by 5 feet 6 inches.

H Servants hall and stairs 16 feet 9 inches by 16 feet 5 inches.

I House-keeper's room 16 feet 6 inches by 16 feet 2 inches.

K Ditto cellar 5 feet 6 inches by 5 feet 6 inches.

L Stairs leading from the offices to the attick frory, without communication with the first and second floors.

MM Steps leading down to the offices.

Let the height of the lower offices be 8 feet 6 inches in the clear; the parlour floor is 4 feet above the furface of the earth, from which take I foot 4 inches, for the thickness of the arch, with joift and board, and 2 feet 8 inches remains for the sofeta of the vaulted arch above the surface; then the floor of the offices must be sunk 5 feet 10 inches below, and their height in the clear will be 8 feet 6 inches.

See the parlour plan.

N Hall 20 feet by 8 feet.

O Parlour 17 feet by 14 feet.

P Closet 6 feet by 6 feet, with steps leading to the garden,

2 Dining room 20 feet by 17 feet.

R Closet 6 feet by 6 feet.

S Great room of a diagonal proportion 28 feet 3 inches by 20 feet, and 25 feet high, equal to the height of the two stories, and the thickness of one floor, the ceiling to be cov'd 5 feet down, and the same projection, with a cornice at foot and colloss above as usual, and the cove to be groin'd to receive the light of all the upper windows, and a gallery for musick over the entrance,

See X i. chamber plan.

T Parlour 17 feet by 17 feet.

V Closet 6 feet by 6 feet.

U Stairs to attick story continued.

W Great stairs no more than one story, 17 feet by 17 feet. The parlour story is 12 feet high in the clear, the chambers the same, and the attick 10 feet.

See the chamber plan.

X Paffage and flairs leading to the attick floor 20 feet by 8 feet.

Y Landing of stairs and passage 4 feet wide.

Z Bed chamber 17 feet by 17 feet. a Dreffing closet 6 feet by 6 feet.

b Passage 6 feet 6 inches wide, c Study or bed room 14 feet by 10 feet.

d Closet 6 feet by 6 feet.

e 20 feet by 17 feet.

f Dresling closet 6 feet by 6 feet,

g Great room continued.

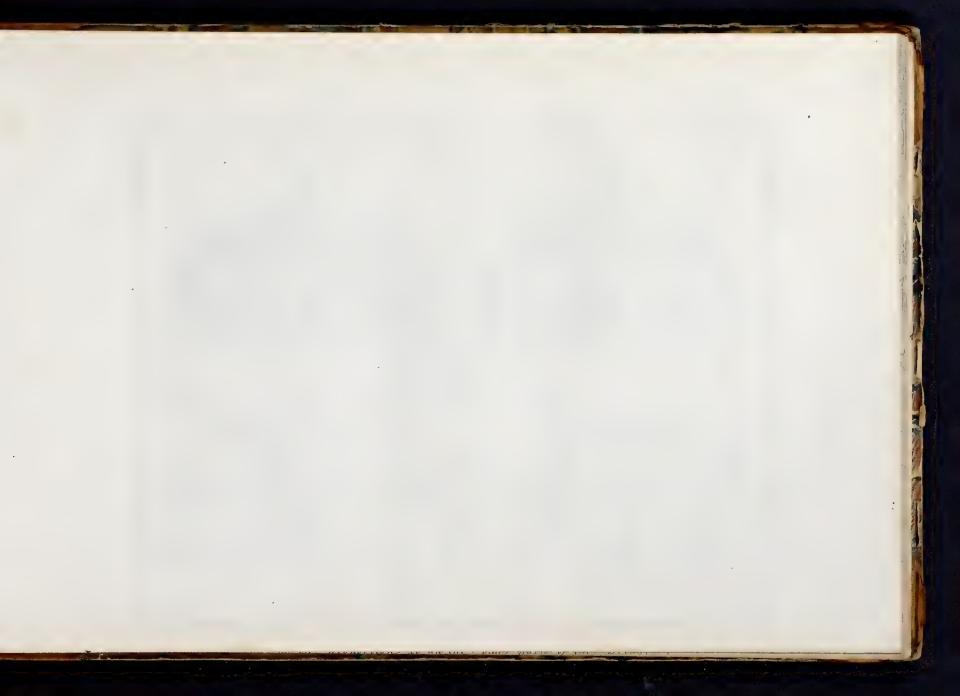
b Stairs to attick story continued.

i Musick gallery to great room.

The attick floor may be divided into 4 bed chambers, with dreffing closets, and 3 without closets, viz, over c e Z, with their adjoining closets, and one next the back front over g, with a closet, by dividing of one window to which must be a passage over i, with a small room on each side, and may be lighted from the roof, and another room over the great stairs lighted from the flank, because a passage must be reserved next the front, for a communication to the stairs leading from the lower offices.

The Estimate to Nº 18.

This plan contains 29 square $\frac{1}{2}$, and may be built in a substantial well finish'd manner for 55 l. per square, which amounts to 1622 pounds 10 shillings.



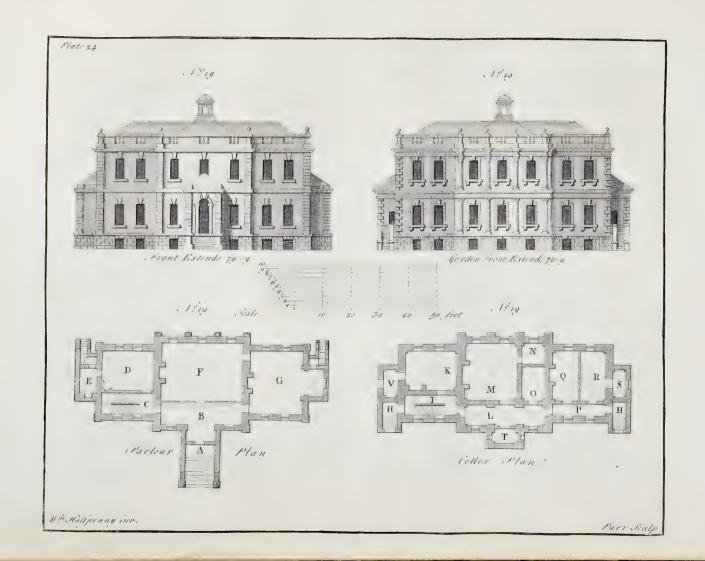


PLATE XXIV. No 19.

The cellar and parlour plans with the 2 elevations of a house 79 feet 9 inches front, and is divided as fol'ores.

A TR int steps.

B Hall or passage 14 feet wide in the middle, and 8 teet at each end.

C Stairs 18 feet by 7 feet 6 inches.

D Parlour 18 feet by 14 feet. E Closet o feet by 6 feet.

F Great drawing room 28 feet 3 inches by 20 feet.

G Dining room 22 feet by 18 feet, with a reces for a fide- L Passage 7 feet 3 inches wide.

board 10 feet by 8 feet.

This ftory is 14 feet high in the clear, and that over it 13 feet, which may be divided into 3 bed chambers; the room over D must be equal to that below, next to which take 8 feet 4 inches from the room over \hat{F} , and divide it into 2 closets, which will be each 9 feet 9 inches by 8 feet; that to the front (by making a door through the wall) will be a dreffing closet for the room over \widetilde{D} , and the other will be dark, which may open to the passage; then the room over F, will be 19 feet 11 inches by 20 feet, its chimney being cut of by the dreffing closet; fix one at the back of that in the room over G, then take from the garden front of the room over G 7 feet 4 inches, and divide it into 2 drefling closets, which will be each 8 feet 10 inches by 7 feet; and the room over G will be 18 feet by 14 seet 8 inches; the chimn y may be fix'd in the angle at the fide of that which may be made in the dreffing closet; the chimney for the room over G may be fix'd in the angle of the building,

N. B. The plan of the great room F is a diagonal proportion, it's length being equal to the diagonal or hyp thenufe of a square, whose side is equal to the width of the room.

See the cellar tlan.

Let the height of the lower offices be 9 feet in the clear; the parlour floor is 5 feet 6 inches above the surface of the earth, from which take I foot 4 inches for the thickness of the vaulted arch with joist and board, and 4 feet 2 inches remains, wich is the height of its sofeta above the furface, and shews that the floor of the offices must be funk 4 feet 10 inches below to make the clear of the story o feet; the plan is divided as follows,

HH Steps leading down to the offices.

I Passage and stairs 17 feet 6 inches by 7 feet 3 inches. K House-keepers room 17 feet 6 inches by 13 feet 6 in-

M Kitchen 19 feet 3 inches by 18 feet.

N Larder 8 feet 6 inches by 8 feet.

O Cellar 10 feet 11 inches by 8 feet.

P Paffage 4 feet wide.

2 Butler's pantry 17 feet 2 inches by 8 feet 7 inches R Cellar ditto,

S Ditto 9 feet 6 inches by 5 feet 6 inches.

TDitto 9 feet by 5 feet.

V House keepers ditto 9 feet 6 inches by 5 feet.

CAUTION.

Observe in the laying out groin'd vaults, to place the Buttments as near as possible to push against each other, more especially when the spand is large, otherwise they will be in great danger of falling, let the workman do his part ever so well; for example, see the buttment between L and M, if that was a large spand, it most unavoidably push out the wall, I lay'd it down thus, as an example in executing the work, omit the pier L, and groin fingle from the buttments of the 2 angles in the kitchen M, &c. because where strength or conveniency is absolutely necesfary (especially in the baser parts of a building) nice regularity must give way

Estimate to No 19.

This building contains 25 fquare ‡, measuring but one of the sheads, and computing them both to be equal to so much of the other plan; for the same reason all the outside st. ps are throw'd into the plans of the porch; the whole may be built in a moderate well sinish'd manner, for 64 pounds per square, which amounts to 1632 pounds.

P L A T E S XXV, and XXVI. No 20.

The ground and chamber plans with the two elevations of a plain house and offices.

See the ground plan as follows.

A HALL and stairs 22 feet by 17 feet. BBB Passages 6 feet wide,

C Porch 10 feet by 10 feet.

D Parlour 12 feet by 10 feet with a dark closet.

E Ditto.

F Parlour 18 feet by 16 feet.

G Ditto.

H Great room 33 feet by 24 feet, and 2 stories high.

I Passage and back stairs.

KButler's pantry 14 feet 6 inches by 8 feet.

L Kitchen 24 feet by 18 feet. M Back kitchen and scullery.

N Paffage.

O Larder.

P Servants hall.

2 Stables.

The parlour and chamber stories is 11 feet high in the clear, and the garrets is in the roof from one end to the other, and the cellars is supposed under IKLMNOP.

See the chamber plan.

RRR Passage 6 feet wide.

S Chamber 18 feet by 16 feet.

T Ditto 16 feet by 12 feet.

V Ditto 18 feet 6 inches by 16 feet.

W Ditto 18 feet by 16 feet. X Great room continued.

Y Landing of back stairs.

Z Closet.

a Dreffing closet to the bed room S.

b A room 18 feet by 12 feet.

c Ditto 18 feet by 11 feet 6 inches.

d Gallery for mufick in the great room.

Estimate to Nº 20.

The body of the house contains 41 square, and may be built in a good plain finish'd manner for 46 pounds per square, the offices and porch contains 20 square 3, at 22 pounds per square.

41 square, at 46 per square. — 1886 0
20 square \(\frac{1}{2}\), at 221, per square. — 451 0

Total expence, 2337 o

PLATES XXVII, and XXVIII. Nº 21.

The ground and elevations of a design for a plain house and offices divided as follows.

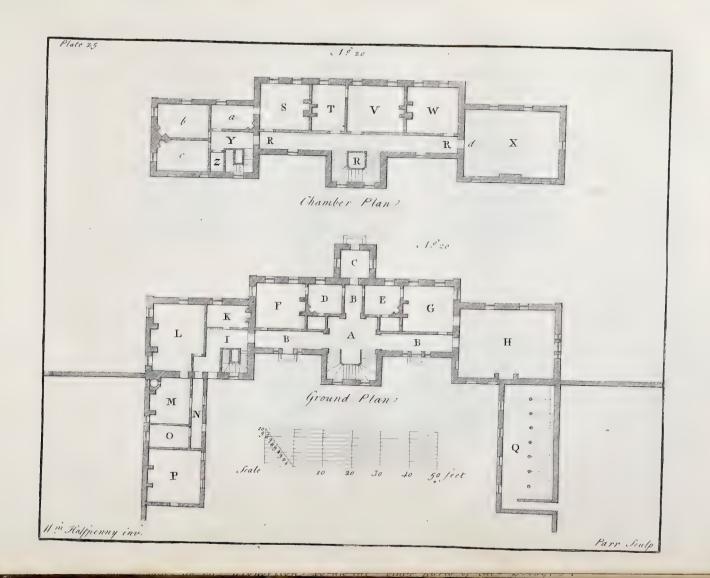
AA CTeps to front.

S B Hall 18 feet by 13 feet.

C Butler's pantry 8 feet by 8 feet.

D House-keepers room ditto. EE Passages and stairs 18 feet by 8 feet.

F Par-



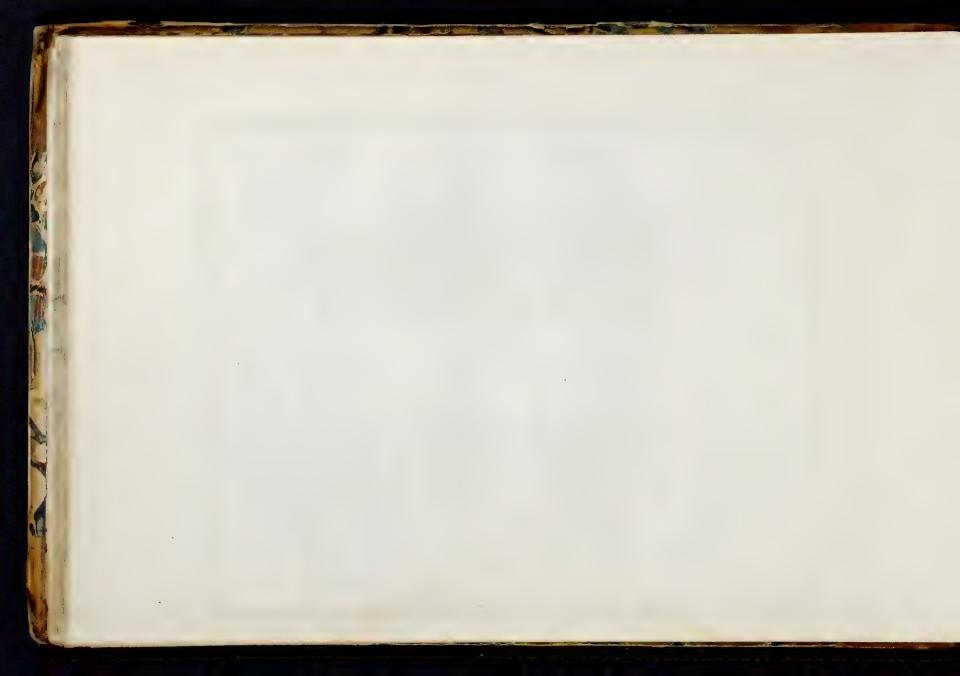


Plate 26.

1.020



Garden Front

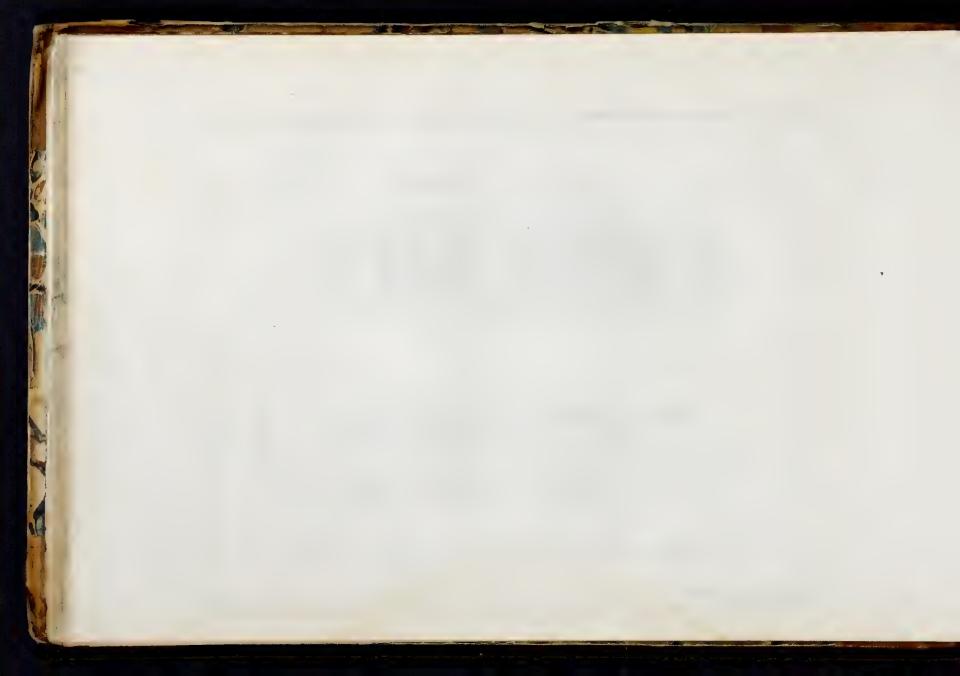
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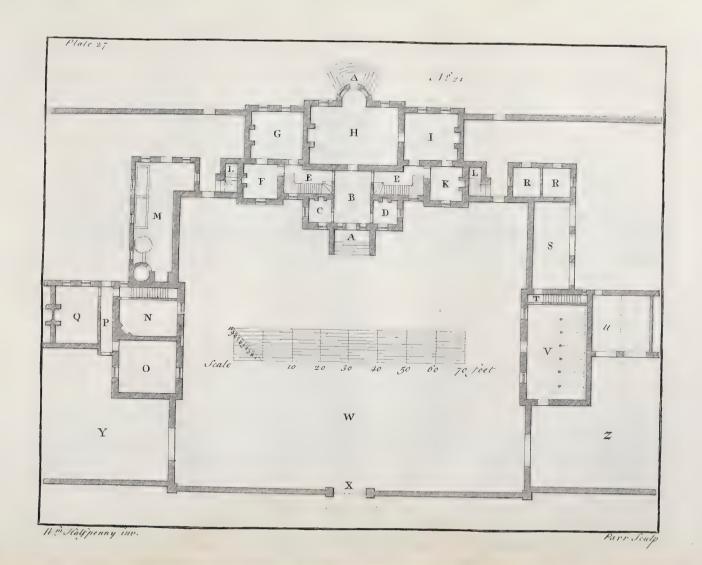


Fore Front

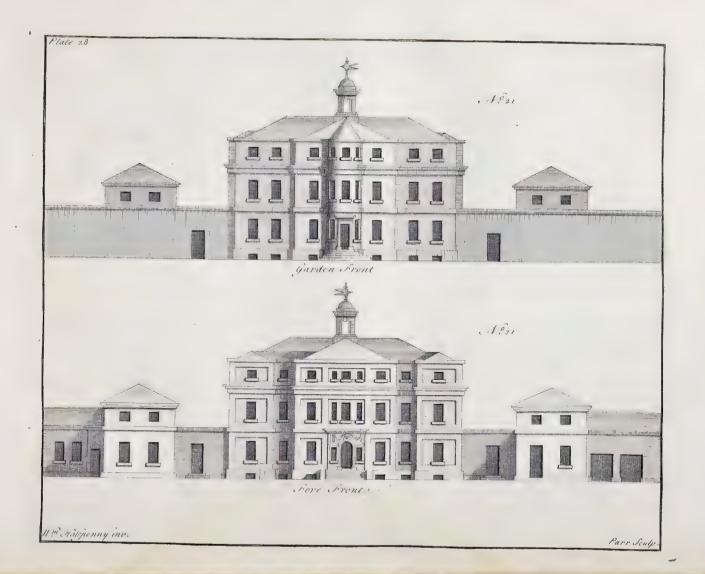
Hm Halfpenny inv.

Parr Soulp .

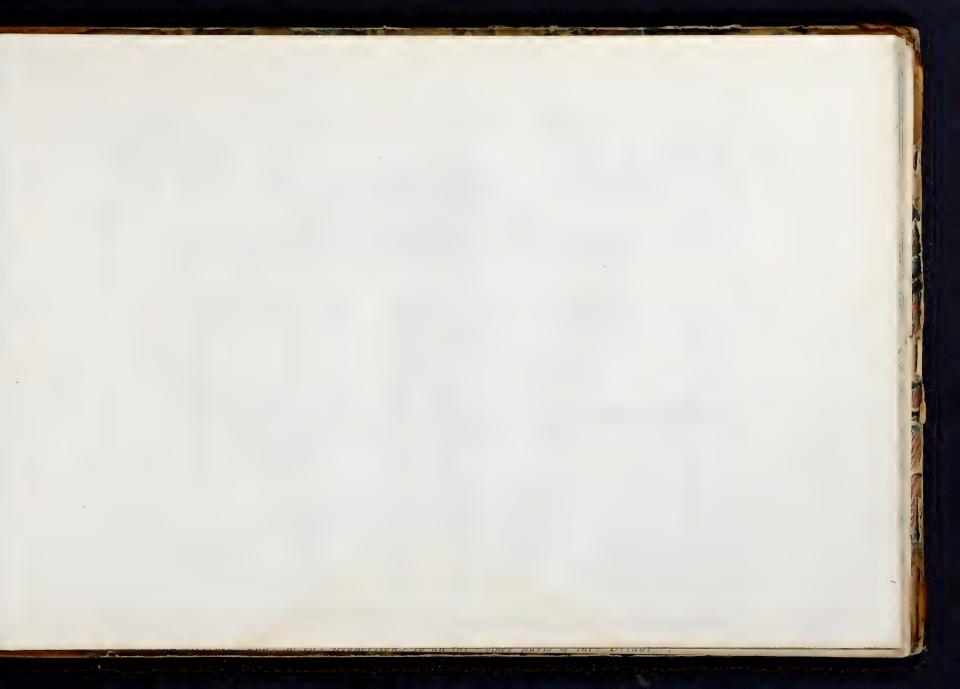


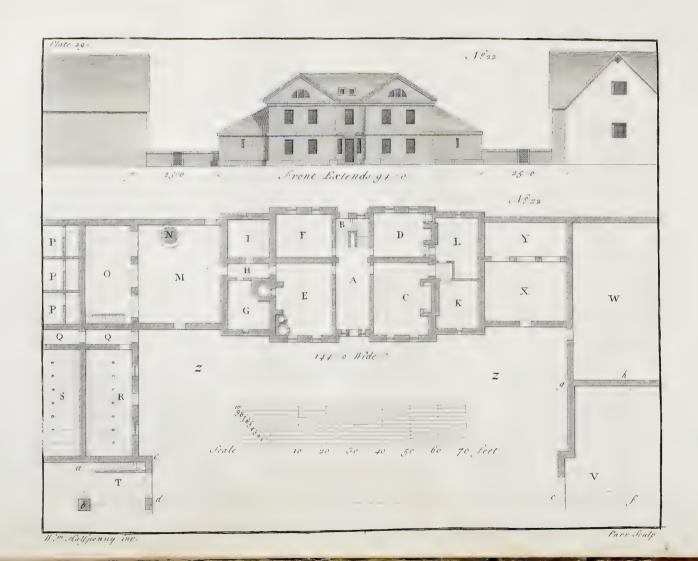












	E / J
F Parlour 11 feet by 11 feet. G Ditto 18 feet by 16 feet. H Great room 31 feet by 20 feet and 2 stories hi I Dining room 18 feet by 16 feet. K Parlour 11 feet by 11 feet. L L Steps to the lower offices. M Sheaded brew-house, &c. N Stewards room. O Ditto store room. I landry. P Passage. Dairy. R R Inclos'd sheads. S Open ditto. T Stairs to servants rooms over the stable. U Coach-houses. W Front Court. X Great gates. T Base court. Z Stable yard, &c. The parlour and chamber story is 12 feet high clear, and the attick 8 feet. The kitchen is supposed to be under H, the hall under I, a passage and little room under cellar under C, cook's larder under D, passages a under EE, and beer cellars under F and G. The chambers will be equal to the rooms bel cept the great room H, which is continued up to tick story. The attick rooms will be the same as those be cept over H, where may be made two bed-room. The body of this house contains 33 square \(\frac{1}{4}\), at 25 l. per square. The offices TV NO, 19 square \(\frac{1}{4}\), at 25 l. per square.	Total expence PLATE XXIX. N° 22. The plan and elevation, of a bouse suited to a gentleman who occupies his own estate. AHALL 12 feet wide. BY Exairs 4 feet 6 inches wide. C Kitchen 26 feet by 20 feet, with a long table represented by dotted lines. D Parlour 20 feet by 15 feet 6 inches. E Brew-house, bake-house, &c. F Dairy 20 feet by 15 feet 6 inches. G Store room 17 feet 6 inches by 15 feet. H Passage 5 feet wide. I Pantry 15 feet by 14 feet. K Cellar sunk 5 steps down, 16 feet 6 inches by 15 feet. H Court yard. N Well. O Open shead with losts over it and stairs leading thereto, and those over the stables. P Hog sties. P Passage to ditto, &c. R Stable. S Ditto. T Coach and cart-house with grannery over it. W Reak yard. X Court yard for poultry, &c. Y Shead for ditto. N. B. A bcd is \frac{1}{2} of the granery. &c. and \text{e f g h is supposed.}
The offices $TVNO$, 10 square $\frac{1}{4}$, at 25 l. per square square, at 10 l. per square	uare. N. B. A bc d is $\frac{1}{4}$ of the granery, &cc. and e f g h is are. $\frac{1}{4}$ of the barn, and the dotted line b f is the middle of the

Estimate to No 22.

The two stories are 10 feet each, and the body of the house ABCDE, contains 28 square $\frac{1}{3}$, and may be built in a good manner for 30 pounds per square.

The sheaded parts GHIKL contains 7 square, at 20 pounds per square.

Poun-ry.	1			f.	s.
23 fquare :,	at 30 l. per square.	ppearanted	-	£. 850	0
7 square ½,	at 30 l. per square. at 20 l. per square.			150	0

PLATE XXX. Nº 23.

Total expence 1000 o

The plan and elevation of a defign for a house 56 feet in the front, with proper offices.

AA HALL II feet wide at the entrance, and 12 feet wide between the middle walls.

BB Stairs 4 feet 6 inches wide, and back stairs lighted from the roof.

CC Parlours 20 feet by 18 feet.

D Breakfast room 12 feet by 8 feet.

E E Closets 12 feet by 12 feet.

F Drawing room 31 feet 6 inches by 20 feet.

G Dining room 20 feet by 20 feet.

HHHHHHH Paffages.

I Servants hall 20 feet by 18 feet.

KH use-keeper's room 18 feet by 20 feet.

L Kitchen 25 feet by 20 feet.

M Back kitchen 18 feet by 12 feet.

N Stairs 6 feet wide to landry room over the kitchen, &c.

O O Cook's larders 10 feet by 9 feet 10 inches each.

P Butler's pantry 18 feet by 14 feet 6 inches.

2 Steward's hall.

R Stable 43 feet by 20 feet.

S Stairs.

T Great front court.

VV Base courts.

The parlour and chamber stories, are each 14 feet in the clear, and the attick 9 feet, the cellars is supposed to be under the body of the house.

Estimate to No 23.

The body of the house contains 36 square $\frac{1}{2}$, and may be built in a well finish'd manner for 40 pounds per square. The closets EE contains 5 square, at 35 pounds per square. The offices P 2, H H and M, contains 19 square $\frac{1}{2}$, at 18 pounds per square. The offices L N O and R, 25 square $\frac{1}{2}$, at 24 pounds per square.

o and it, 25 iquato 2, at 24 pounds pr. iqu		
	£.	5.
36 square 1, at 40 l. per square. — —	1460	0
5 square, at 35 l. per square. — —	175	0
19 square 1, at 18 l. per square	351	0
25 square , ar 24 l. per square	612	0
J 1 1 1		
Total expence	2508	0

PLATE XXXI. N° 24.

Is the cellar, ground, and chamber plans, with the elevation of a design for a house and offices 107 feet in front, suitable for a gentleman of a middle fortune.

A TRont steps.

B Hall 15 feet by 15 feet.

C Little parlour 11 feet by 10 feet.

D Parlour 15 feet by 12 feet.

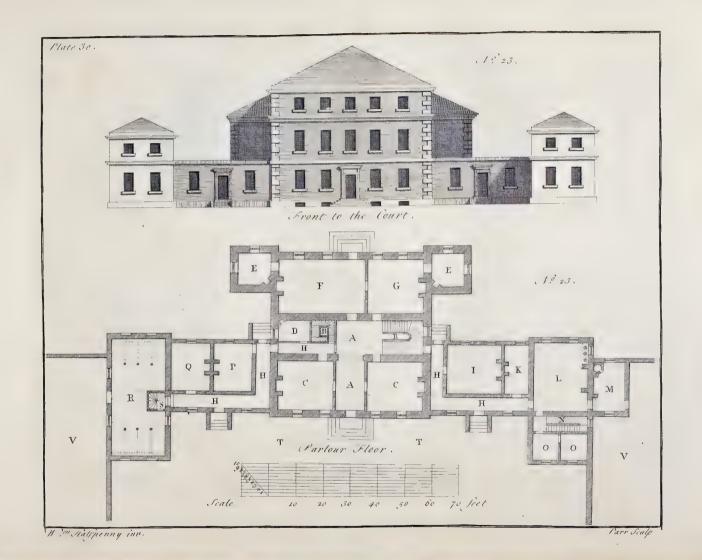
E Passage into the garden, &c.

F Closet 9 feet by 6 feet.

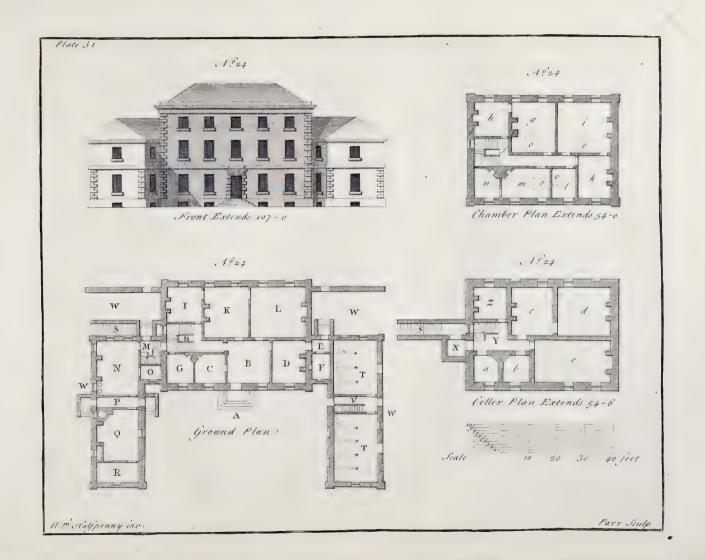
G House-keeper's room 10 feet by 9 feet 7 inches.

H Great stairs 12 feet 6 inches by 10 feet.

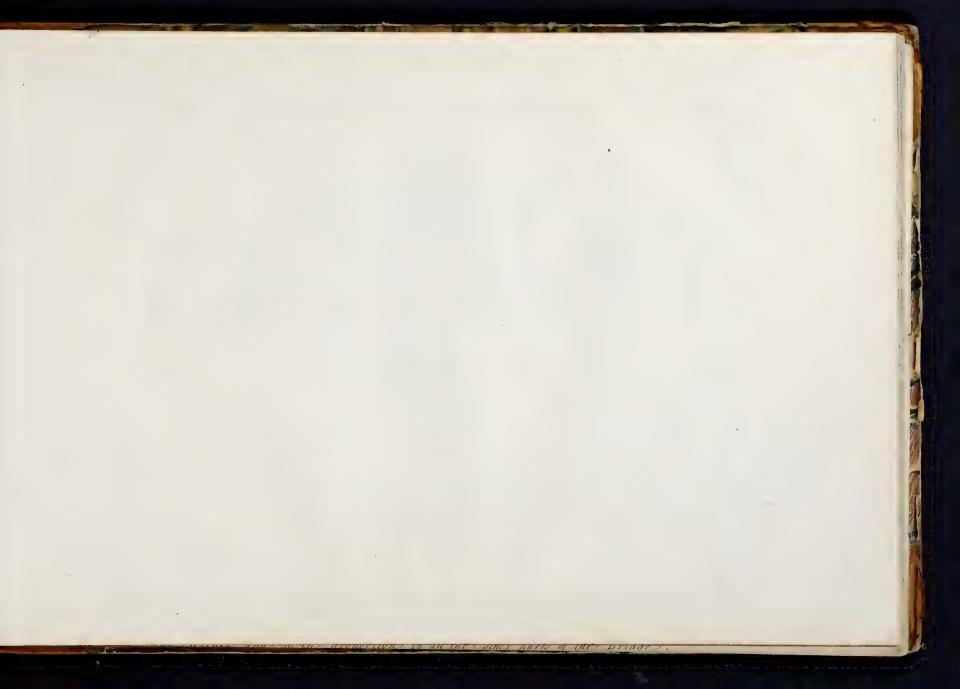
I Par-

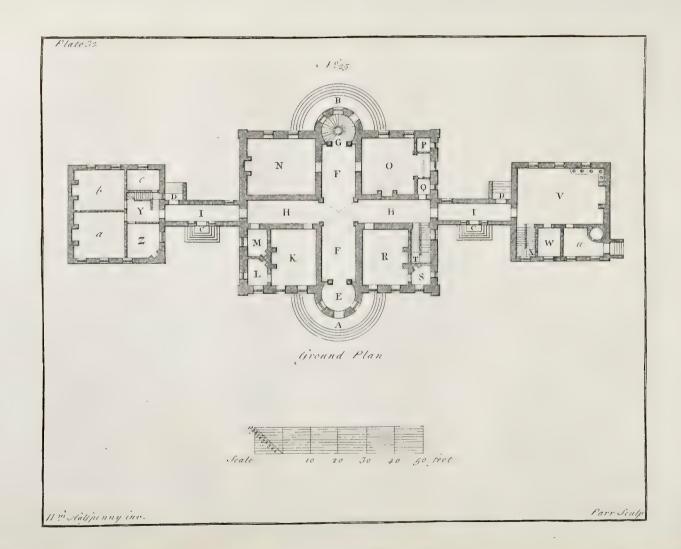




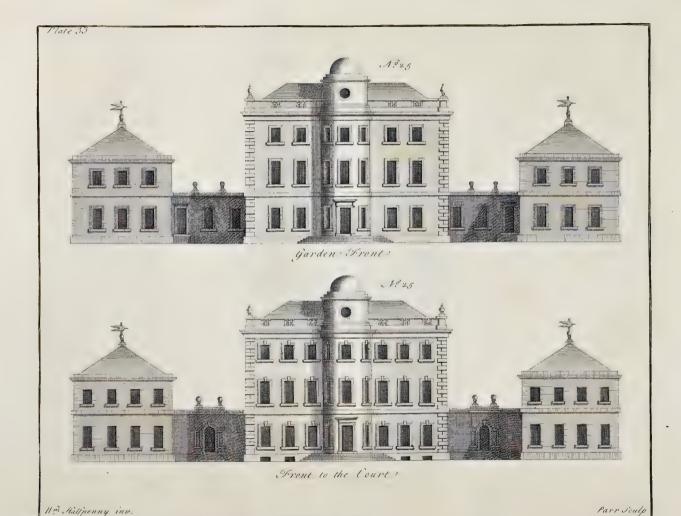












I Parlour 12 feet 6 inches by 12 feet 6 inches. K Drawing room 18 feet by 16 feet. L Dining room 20 feet by 18 feet. M Passage and stairs to rooms over the kitchen, &c. N Kitchen 20 feet by 15 feet. O Cooks pantry. P Passage 3 feet 6 inches wide. 2 Back kitchen, brew-house, &c. 18 feet 6 inches by 15 feet. R Cook's larder 15 feet by 7 feet. S S Steps leading to the lower offices. TT Stables. V Paffage and stairs to lofts. WWWW Back courts, &c.

See the cellar plan.

X Outfide paffage into the cellars. ? Stairs and passage. Z Butlers pantry. a b Wine-cellars. c Servants hall. d Common cellars. e Ale-cellar. f Stairs. gilm Bed chambers. k n Dreffing rooms. oooo Beds. The parlour and chamber stories, are each 11 feet high

in the clear, and the attick offeet.

Estimate to No 24.

The body of the house contains 22 square, and may be built in a good manner for 38 pounds per square, the offices 22 square , at 25 pounds per square.

22 square, at 38 l. per square. 22 square 4, at 25 l. per square. Total expence 1402 .13 4

PLATES XXXII, and XXXIII. No 25.

The ground plan and 2 elevations of a defign for a house and offices, which extends 193 feet.

A F Ront steps. B Garden front ditto. CC Common entrance ditto. DD Ditto to garden. E Entrance 12 feet diameter F F Paffage 12 feet wide. G Great stairs, HH Paffage 8 feet wide. II Ditto 6 feet wide. K Parlour 20 feet by 16 feet. L Closet 9 feet 9 inches by 7 feet. M Ditto. N Drawing room 24 feet by 20 feet. O Dining room 20 feet by 19 feet, and the recess for the fide-board 5 feet deep. P Closet 5 feet by 4 feet 6 inches. 2 Butler's private entrance. R Parlour 20 feet by 16 feet. S Closet 7 feet by 7 feet T Back stairs 7 feet 6 inches wide. V Kitchen 31 feet by 20 feet. U Scullery 16 feet by 10 feet 6 inches. W Cook's larder 10 feet 6 inches by 8 feet. X Stairs to rooms over the kitchen, &c.

Y Ditto to rooms above.

Z Stewards

Z Stewards room.
a Servants hall.
b House-keepers room.
c Butler's pantry.

The parlour and chamber flory are each 14 feet high in the clear, and the attick 12 feet.

The cellars are intended under the body of the house, and there may be garrets in the roof.

Estimate to No 25.

The body of the house contains 46 square, and may be built in a good manner for 50 pounds per square. The passage H_5 square $\frac{1}{4}$, at 18 pounds per square.

The offices 24 square $\frac{1}{4}$, at 30 pounds per square.

46 fquare, at 50 <i>l. fer</i> fquare. — — 2300 5 fquare \(\frac{1}{4}\), at 18 <i>l. per</i> fquare. — — 94 24 fquare \(\frac{1}{2}\), at 30 <i>l. per</i> fquare. — — 735	0 10
Total expence 3129	10

PLATES XXXIV, and XXXV. Nº 26.

The plan ands elevations of a design for a house and wings which extends 156 feet.

See parlour plan.

A Front steps.

B Hall 27 feet by 24 feet.

CC Passage and stairs 20 feet by 12 feet.

D Parlour 14 feet by 12 feet.

E Dining room 22 feet by 20 feet.

F Closet 8 feet diameter.

G Passage.

H Drawing room 2 stories high, 32 feet by 24 feet.

I Back stairs 8 feet wide.

K Parlour 20 feet by 16 feet 6 inches.

L Ditto 20 feet by 20 feet.

M Closet 8 feet diameter.

N Tarras.

O O Steps to garden.

P P Passages 5 feet wide.

Masser room 20 feet by 20 feet.

Misser steps ditto.

The roofs of sheads

TTTT Back courts.

See ground floor.

VV Passages and cellar stairs.

WW Paffages,

XX Cellars.

Y Sheads.

Z Cellar.

a Servants hall.

b b Kitchen.

c Back kitchen with ftews, &c.

d Scullery.

e e Cook's larder.

f Butler's pantry.

g House-keeper's room.

b Steward's room.

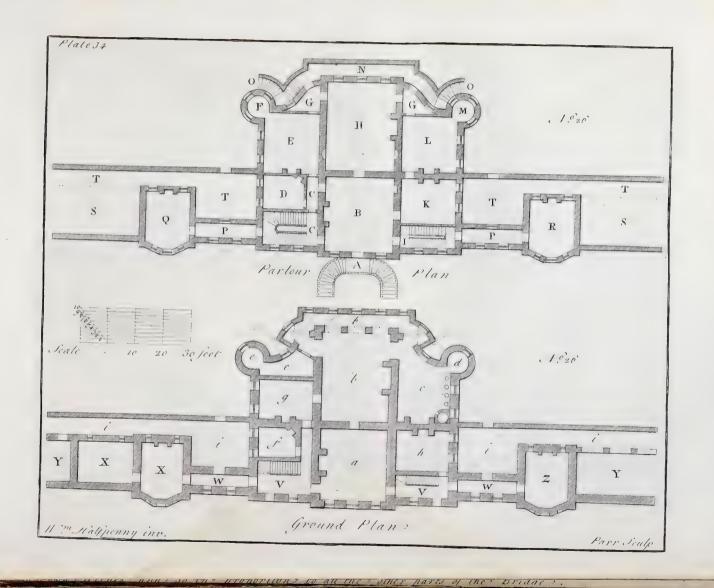
iiii Back courts.

The ground story is 10 feet high in the clear, the parlour 14, the chambers 12, and the attick 9 feet, the garden front chambers will be equal to EL, and their dressing rooms to FM, with a closet equal to GG, the room over K will be 16 feet 6 inches by 15 feet 6 inches, with a passage of 4 feet wide from the back stairs.

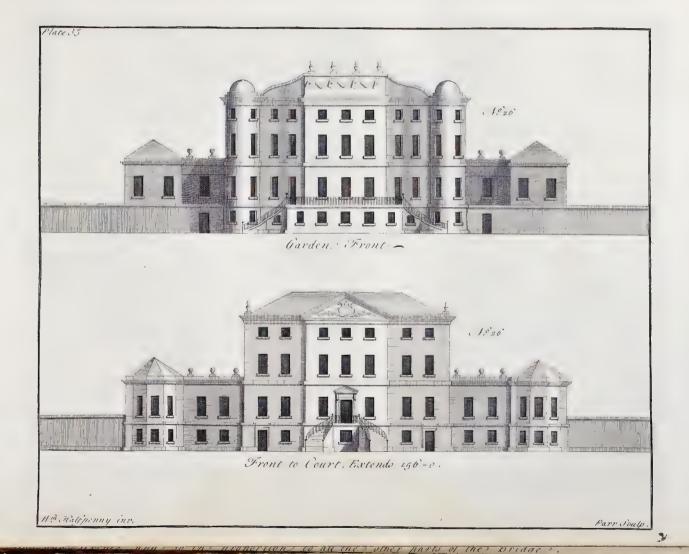
PLATES XXXVI, and XXXVII. No 27. The ground plan and 2 elevations of a design for a house and offices.

AGREAT court 108 feet wide.

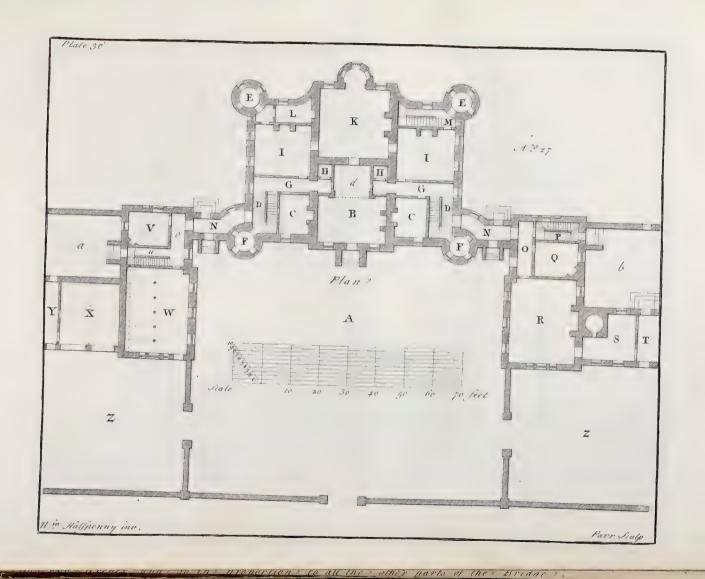
B d Hall 27 feet 6 inches by 24 feet, B is 2 ftory high



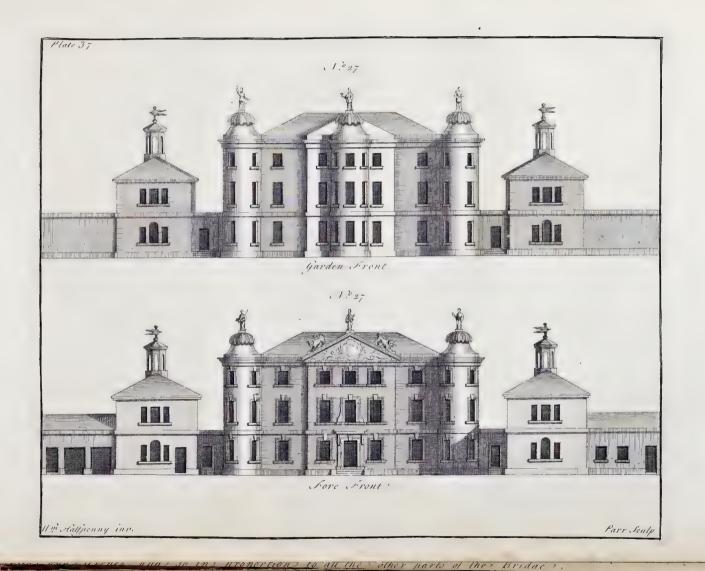
















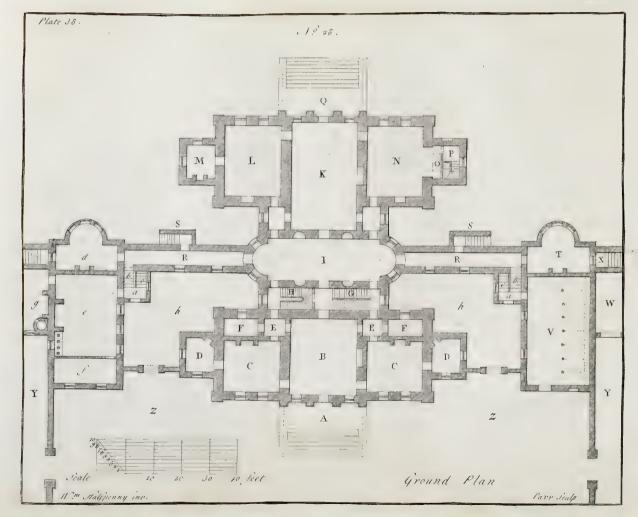




Plate 39. . 10 20 Scale

Him Halfpenny inv.

Parr Soule

	-
high, but d is cover'd with an arch level with the	par-
lour ceiling, for a paffage of communication in	the
chamber stairs.	

CC Parlours 14 feet by 11 feet 6 inches.

D D Stairs 8 feet wide.

E E Closets 8 feet diameter.

F F Ditto for butler's pantry and house-keeper's.

G G Paffages 5 feet wide, leading under the stairs to the offices.

HH Dark closets.

II Parlour and dining room, each 20 feet by 18 feet.

K Drawing room 24 feet by 24 feet, and 2 stories high, not including the recess of the bow-window, which is 8 feet diameter.

L Closet 12 feet by 6 feet.

M Private stairs 6 feet wide.

NN Passages 5 feet wide.

OO Ditto.

P Stairs to rooms over the kitchen, &c.

2 Cook's larder 15 feet by 12 feet,

R Kitchen 30 feet by 22 feet.

S Scullery and bake-house.

T Passage.

V Steward's room 14 feet by 12 feet. U Stairs to rooms over the stable, &c.

W Stables.

X Coach-houses.

Y Paffage.

ZZ Courts.

a & Back courts.

The servants hall, with cellars, and other offices is sup- M Closet 12 feet by 10 feet. pos d to be under this floor.

The parlour and chamber stories are each 12 feet high

in the clear, and the attick 10 feet.

N. B. The closets over FF, must be come at from the balf pace of the stairs.

Estimate to N 27.

The body of the house contains 43 square 1, which may be built in a good workman like manner for 50 pounds per square; the offices 2 RVW, 27 square, at 25 pounds per square; the offices STXY, and passages NN, 15 square, at 18 pounds per square.

	£.	S.
43 square 1, at 50 l. per square. —	2175	0
27 square, at 25 l. per square. — —	- 675	0
15 square, at 18 l. per square. — —	- 270	G
Total expence	3120	0

PLATES XXXVIII, and XXXIX. N° 28.

The plan and elevation of a defign for a house and offices extending 196 feet b inches.

ACTEPS to the great court.

B Hall 27 feet by 24 feet, 2 stories high.

CC Parlour 20 feet by 18 feet 6 inches.

DD Closets 12 feet by 10 feet.

EEEE Passages.

F F Closets.

G Best stairs 8 feet wide.

H Back stairs ditto.

I Lobby 51 feet 6 inches by 15 feet.

K Great room 38 feet by 24 feet, 2 stories high.

L Drawing room 25 feet by 20 feet.

N Dining room 2 5 feet by 20 feet.

O Side-board in ditto.

P Private stairs from the butler's pantry,

2 Garden front steps.

ropertions to all the other parts of the Bridge

R R Passages 5 feet wide.

G voites and a post of the contract of the S S Steps

S S Steps to the garden.

T Master's boating room, or steward's hall, 22 feet by 16 feet.

V Stable 40 feet by 22 feet.

W Coach-houses,

X X Steps leading down to a paffage under R R to the lower offices.

YY Base courts.

ZZ Great front court.

aaaa Little inward courts and entrances.

b b Steps up to the passages R R. c c Steps down to the lower offices.

d House-keeper's room 22 feet by 16 feet.

e Kitchen 30 feet by 22 feet.

f Cook's larder 22 feet by 9 feet 8 inches.

g Back kitchen and scullery.

N. B. The stairs up to the rooms over the kitchen and stables, &c. begins in the passages R R, close to the steps b, and sties over c, winds over a, and from thence in a straight stight over b, so into rooms over T and d, &c.

The parlour story is 15 feet high in the clear, and the chamber story 14; the attick which stands over the lobby I, may be divided into lodging rooms, or made a billiard room; the way into it must be from a building rais'd at the head of the stairs, to make headway for the same, as is represented in the front, by dotted lines, which will be no eyesore, because it can't be seen in the great court, the front building projecting so much before it; there is garrets suppos'd to be in the roof, and there may be a square story of 6 feet 4 inches under the billiard room, because the floor of the latter is suppos'd to be but 2 feet 6 inches below the ridge of the roofs, and there will be 4 rooms of 12 feet by 10 feet in the square territt, over the closets, &c. DDMP,

Estimate to No 28.

The body of the house (except the lobby I) contains

67 square $\frac{1}{2}$, and may be built in a good middle finish'd manner for 60 pounds per square; 11 square $\frac{1}{4}$ on the lobby at 65 pounds per square; 18 square and $\frac{1}{4}$ of offices $d \in FVT$, at 25 pounds per square; 9 square $\frac{1}{3}$ of passages RR, at 14 pounds per square.

Total expence			
6 square 3, at 14 l. per square. —	– 88	12	4
33 square 1, at 25 l. per square	- 833	6	8
11 square 4, at 65 l. per square	763	15	0
67 square 1, at 60 l. per square	4050	0	0
	£.	5.	d.

PLATES XL, and XLI. No 29.

The ground plan and two elevations of a design for a house and offices; see the following divisions.

A Reat court 100 feet wide.

J B Hall 26 feet by 26 feet, one story high.

CCCC Passages 6 feet wide.

D Little parlour 11 feet by 11 feet.

E Back stairs.

F Paffage 6 feet wide.

G Best stairs.

HH Paffage 6 feet wide.

I Parlour 18 feet by 18 feet,

K Dining room ditto.

L Drawing room 25 feet by 16 feet, not including the recess for the bow window.

M Great room 35 feet by 25, feet two stories high, not including the recess for the bow window.

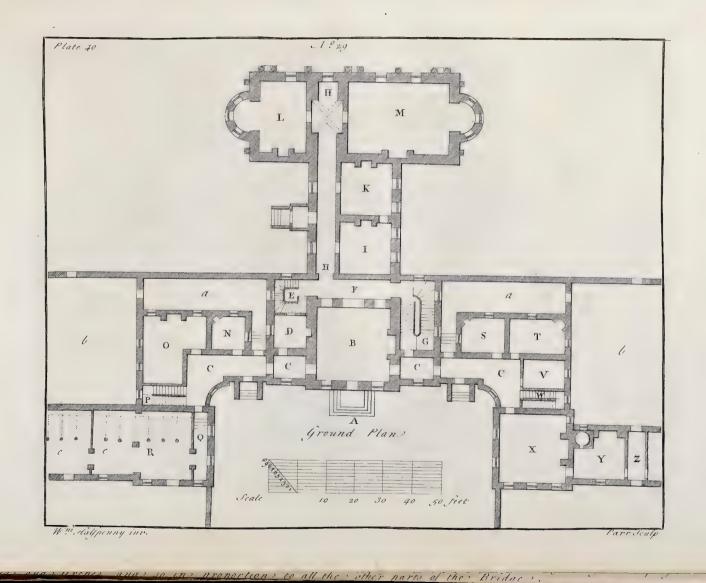
N Steward's room 11 feet by 11 feet.

O Servants hall 23 feet by 22 feet.

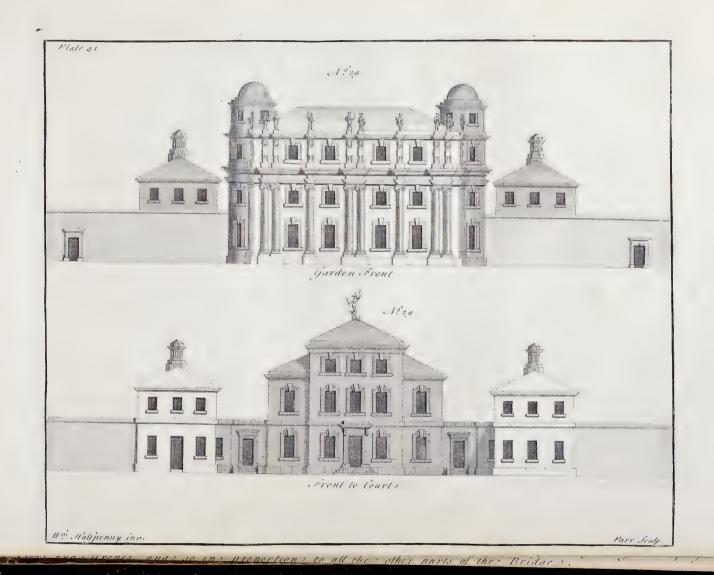
P Stairs to rooms over the stable, &c.

2 Paffage.

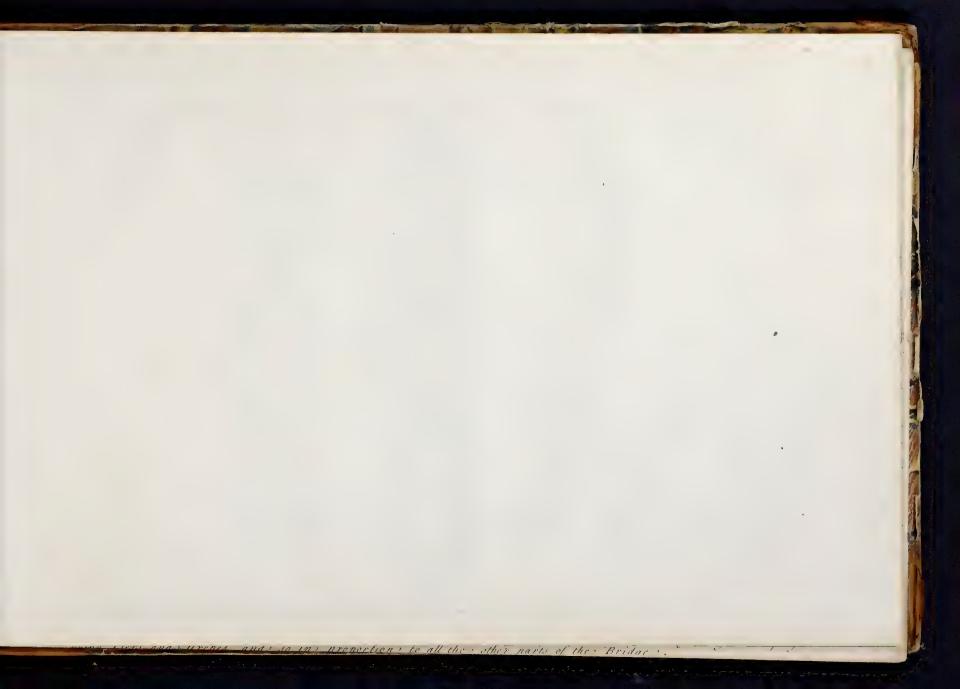
R Stable

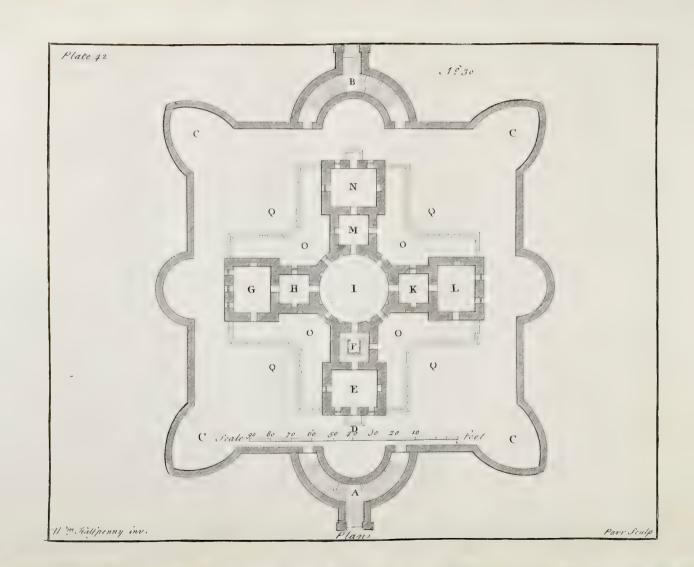












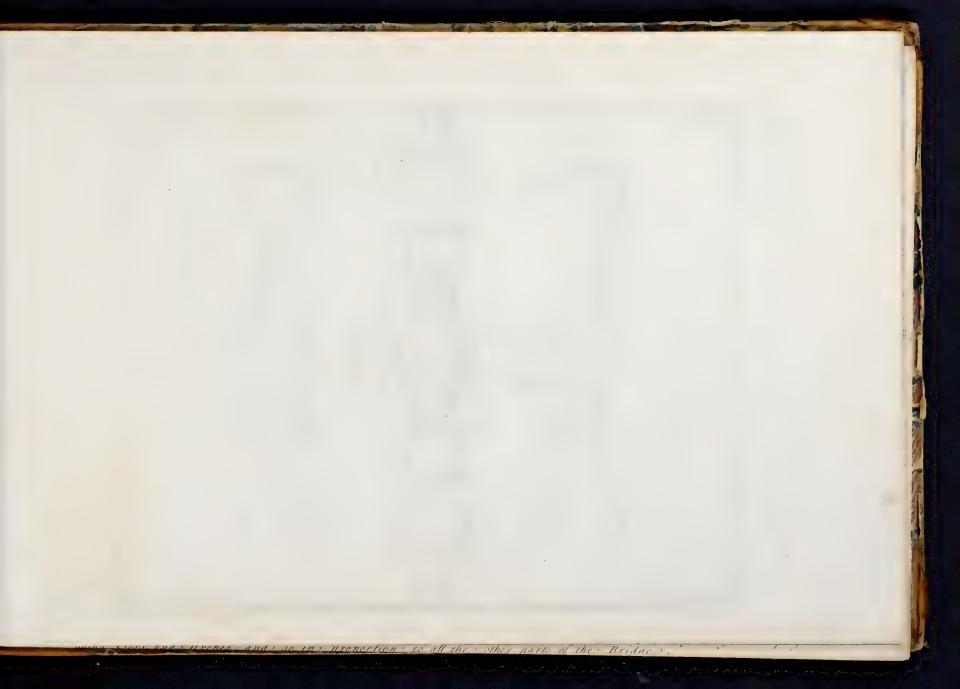
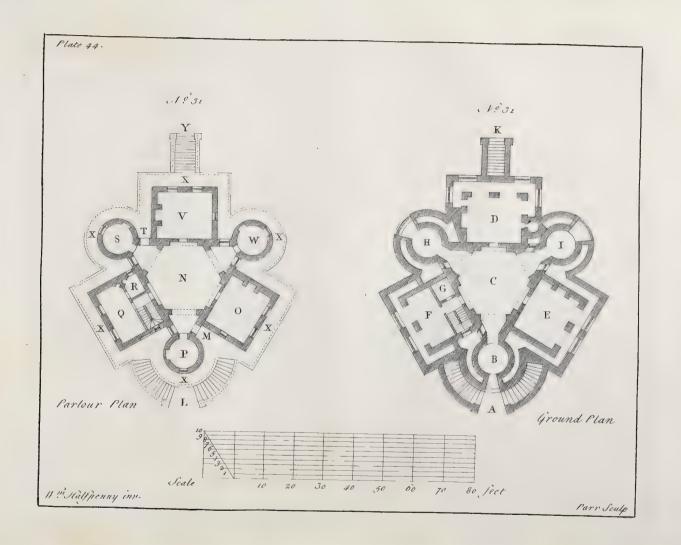


Plate 43 . 1:30 Front) Seale 1011111 10 20 30 40 50 60 70 80 90 100 110

Hm Halfpenny inv.

Parr Soulp



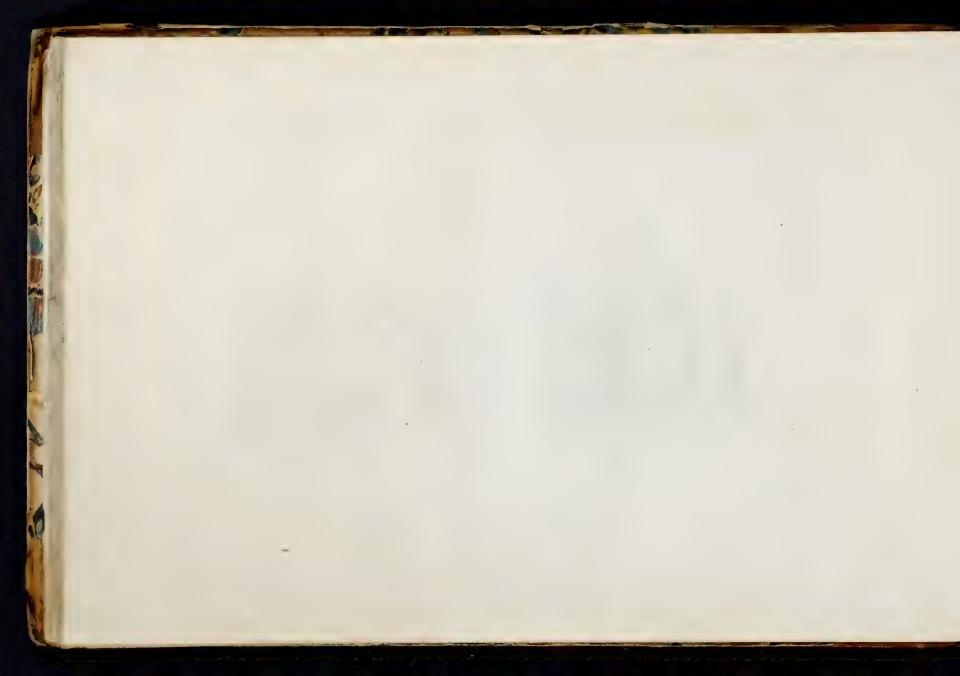


Plate 45.

1332.



Garden Front

ana so in Archertien to all the other parts of the Bridge.

(1331.

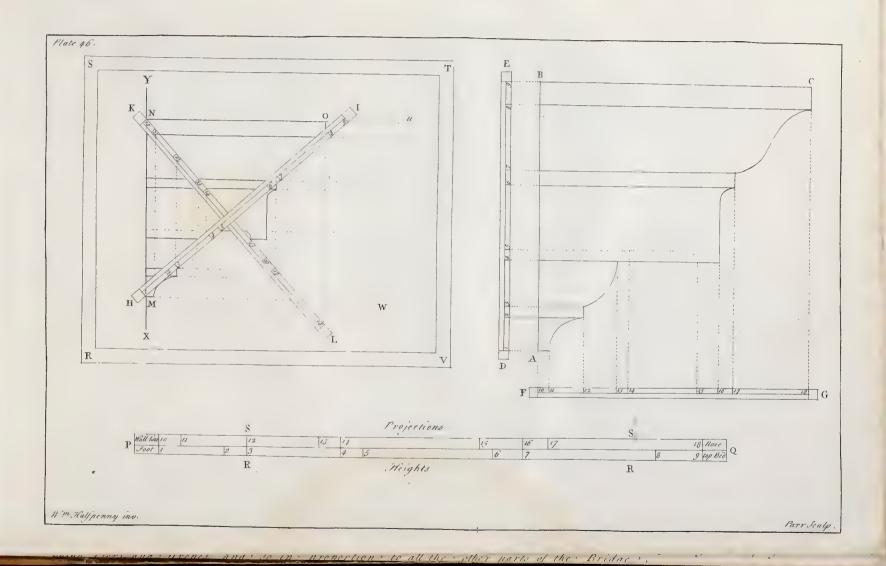


Front to Court

Hi Maypenny inv.

Parr Sculp







R Stable.

S Butler's pantry 15 feet by 11 feet.

T House-keeper's room 19 feet by 11 feet.

V Cook's larder 15 feet by 10 feet.

W Stairs to rooms over the kitchen, &c.

X Kitchen 24 feet by 24 feet. Y Scullery and bake-house.

Z Paffage.

a a Back courts.

b b Ditto.

cc Low building equal to YZ.

N. B. Cellars is supposed to be sunk under all the body of the house, and garrets in the roofs.

The parlour story is 15 feet high in the clear, the chambers 14, and the attick 10 feet.

The Estimate to No 29.

That part of the house mark'd HHIKLM, contains 40 square 2, and may be finish'd in a good manner for 75 pounds per square; ditto mark'd CDEFGCB 24 square, at 65 pounds per square; RX, 15 square and *, at 28 pounds per square; POCNCSTV, 25 square and 1, at 15 pounds per square; YZCC 11 square and 1, at 20 pounds per square.

	£.	5.
40 square 1, at 75% per square.	3037	10
24 square, at 65 l. per square	1560	0
15 square ½, at 28 l. per square. —	434	0
25 square \(\frac{1}{4}\), at 15 \(l.\) per square. \(\)	- 378	15
11 square $\frac{1}{4}$, at 20 l. per square.	230	0
Total expence	5640	5

PLATES XLII, and XLIII. No 30.

The plan and elevation of a defign for a summer-lodge, built on an eminence, and inclosed by bastion, &c. See the fol owing divisions.

AF Ront Steps.

CCCC Bastions.

E Hall 21 feet by 18 feet.

F Stairs 14 by 14 feet.

G Parlour 21 feet by 18 feet. H Ditto 14 feet by 14 feet.

I Chapel 32 feet diameter cover'd with a dome, the dotted corveline represents a gallery trust from the walls. placed level with the upper floors for a communication between chambers, &c.

K A room 14 feet by 14 feet.

L Dining room 21 feet by 18 feet.

M A room 14 feet by 14 feet. N Drawing-room 21 feet by 18 feet.

OOOO Areas level with the half-pace of the steps AB. inclosed above by a cirband, iron railes; see the dotted lines, &c.

P A door leading to the offices below, by a subterranean passage; see the door on the steps of the elevation.

The parlour and chamber stories are each 14 feet high in the clear, and garrets may be made to be come at by a

fecond gallery.

The lower offices may be divided, as follows; fervants hall under E; the kitchen under I; cook's two larders under H; with a passage between them leading to the room under G, for the house-keeper's room; the butler's pantry under K; awine cellar under L; and the fleward's room under N; with a common arch'd cellar under 2222.

Estimate to No 20.

The chapel I contains 13 square, and may be built for 70 pounds per square.

All the other part of the house contains 42 square and

1, at 50 pounds per square.

13 square

13 square, at 70 l. per square. — 910 c 42 square, at 50 l. per square. — 2.25 0

Total expence 3035 o

PLATE XLIV, No. 31.

The ground and parlour plans of design for a building form'd by an equelateral triangle, whose sides BHIB, or PSWP are 44 feet, which are the extreme points of the angle, and is the centers of the circular closets, &c. The dimensions of the several rooms are as follows.

A FOOT of steps, which leads up to the tarras.

B Porch or entrance into the lower offices, 9 feet
6 inches diameter, and its floor 2 feet below the surface
of the earth.

C Servants hexagon hall, 21 feet 6 inches diameter, lighted by 4 windows from the tarras.

D Kitchen 17 feet 6 inches by 15 feet 6 inches in the clear of the walls, which bears the upper stories.

E House-keeper's room ditto.

F Cellar 17 feet 6 inches by 8 feet 9 inches in the clear, between the stairs, and wall which bares the upper stories.

G Little cellar 6 feet 6 inches by 6 feet 6 inches.

H Butler's pantry 9 feet 6 inches diameter.

I Larder ditto.

K Steps to the garden.

N. B. The walls of this story is 2 feet 6 inches thick, and the void space between them 2 feet 3 inches.

See the parlour plan.

L Foot of the steps.

M Door of entrance from the tarras.

N Hexagon hall 22 feet diameter, 2 stories high.

O Parlour 18 feet by 16 feet.

P Closet 10 feet diameter.

2 Study 18 feet by 9 feet.

R Closet 7 feet by 6 feet. S Closet 10 feet diameter.

T Door to the tarras.

V Dining-room 18 feet by 16 feet,

W Closet 10 feet diameter.

XXXXXX Tarras 5 feet wide, inclos'd by iron rails.

Y Garden steps.

PLATE XLV. Nº 31.

The Etarras is 8 feet above the furface of the earth, from whence the floor of the hall rifes 6 inches, and the floor of the offices is 2 feet below the furface, so the whole height from the office floors, to the floor of the hall is 10 feet 6 inches, from which deduct one foot for the thickness of the floor, and 9 feet 6 inches remains for the height in the clear of the office story. The parlour story is 14 feet high in the clear, and the story over it 8 feet, and trus'd galleries in the hall for a communication between the upper rooms; there is garrets in the roof, and a billiard room over the hall, with a cov'd ceiling.

Estimate to No 31.

The whole plan including steps and tarras, contains 4t square and $\frac{1}{4}$, and may be built one with the other in a good manner for 35 l. per square, which amounts to 1452 pounds 10 shillings,

PLATE XLVI.

Shows the use of a new invented architectonick rule, with the method of making them suitable to the proportions of any mouldings.

FIRST, chuse the author whose works are most suitable to your purpose (I have made choice for this example

ample Mr. Gibbs's tuscan cornice) and provide a rule long enough to contain the height and projection of the largest cornice, or moulding your work requires, and mark a middle line on the flat fide, (See DE) on one fide of which set the hieghts of all the members, (as the fide RR, on the rule $P\mathcal{Q}$) also FG, whereon mark all the projections, (as the fide SS, on the rule $P\mathcal{Q}$,) then is $P\mathcal{Q}$ the rule for the tuscan cornice, which answers the ends of DE and FG. These last I am oblig'd to represent by two rules in the example, because of shewing all the heights and projections at one view; and on the other flat fide of the rule $P\mathcal{Q}$, may be mark'd the architestrave with base and capital of the column, or any other mouldings required.

See the drawing board RSTV, and the use of the rule PQ, and observe HI is equal to DE, and the side

RR, also KL to FG, and the side SS.

First, draw the perpendicular wall line XY, of a length at pleasure, and set on the intended height MN, from

which draw the lines MW and NV, of a length at pleafure, at right angles with MN; then take the fide RR or HI and fet the division or foot mark'd I on the point M, and move the end I'till the division 9, which is the top bed touches the line NU, then with a pencil point out the feveral divisions, I, 2, 3, 4, 5, 6, 7, 8, 9, through which draw lines for the height of the feveral members, parallel with NU.

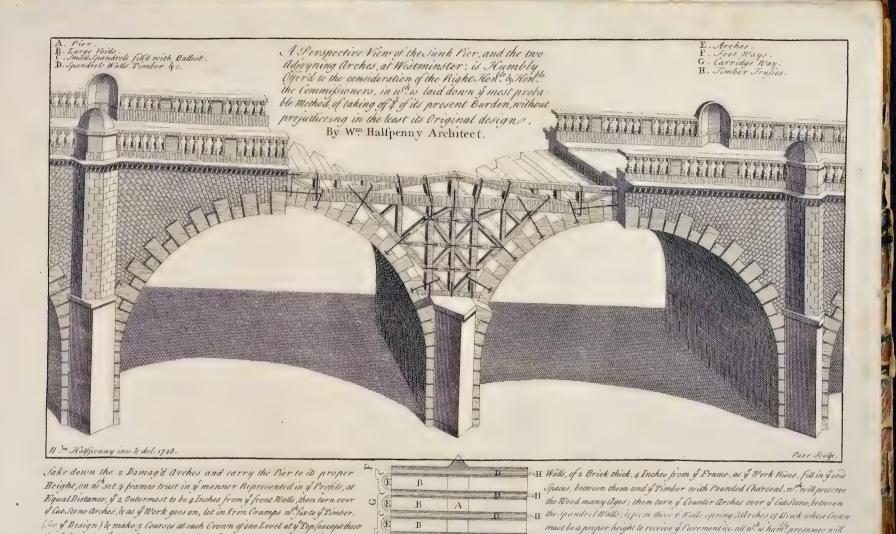
To fet on the projections, take the fide SS or KL, and fet the mark 10 on the point N, or any other part of the wall line XY, and move the end L about, 'till K L is at right angles with HI, then from the divisions 10, 11, 12, 13, 14, 15, 16, 17, and 18, with a pencil point out the feveral projections, and draw them parallel with XY, then draw the feveral moulded corves in the usual manner, which gives the requir'd cornice MNO, and so of all other members in architecture.

FINIS.



prepartien, to all the other parts of the Bridge





On a farther enquiry and Measurement I find there is 12500 Cube feet of Ballest on the part whereon the Trußes extends, each Foot containing One hundred Weights, which amounts to upwards of 629 Juns of which 500 Juns is not only usedefs but sprejudicial to both River and Arches and so in archertien to all the sother parts of the Bridges.

by J. Brindley in New Bond Street.

Whil according to Act of Parliament

H not only prevent if great Weight of Ballast, but throw a major part of & Buren on if

in y fronts) not will y better Resist y Trufes; then build Six Spandrel Brick











1/88 PPX = #922

